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# MILITARY MODELLING



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### ShkH DANA vz.77

Building the Hobby Boss  
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### 3D M5 Half-Track

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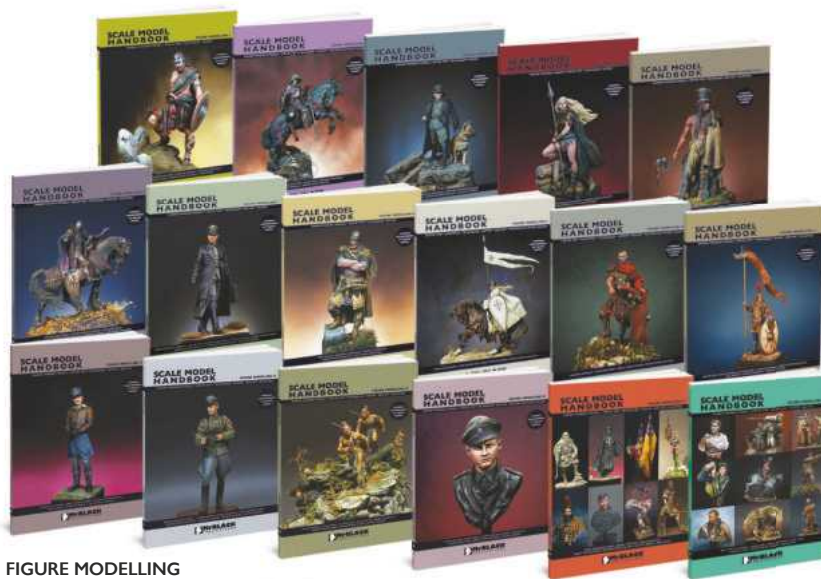


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## Stand Easy...

Welcome to Military Modelling Volume 47, Issue 6 which will land on your doormats a few days before the 73rd Anniversary of the D-Day landings. Across the globe, the media tends to focus only on the round numbers when it comes to anniversaries. Personally, I think we can all spare just a few minutes of our time to ponder on the major events in world history such as those that took place on the Normandy beaches. This huge logistical achievement has remained unsurpassed and, considering how clinical warfare works today, is likely to remain the largest seaborne invasion of all time. 156,000 men from 13 countries delivered by nearly 5,000 landing and assault craft and supported by nearly 300 escort vessels, unleashed against one common enemy on a single day in June 1944. Such an epic operation has left its mark on the landscape and I urge anyone interested in military history (who hasn't already done so), to jump on a ferry and immerse yourself in one of the greatest operations of all time.

With D-Day in mind, our front cover pays homage to the ubiquitous landing craft in the shape of Gary Radford's superb Revell kit. Also this month, Mark Bannerman presents his impressive Churchill Bridgelayer and Radek Pituch returns with the first of a two-part about his superb 'En Route to Berlin' diorama. It was a tough call for the cover image this month and Cristian Lupu's DANA came an excruciatingly close second. Further contributions from Ray Westlake and Peter Gillson are backed up by newcomers to Military Modelling, John Norris and John Fidoe not forgetting the second part of Marcel Von Hobe's 3D-printed project. Once again, I have packed as much in as I can and I trust that there will be something for everyone within these pages.

If you think you have a project that I might be interested in, please send me a message. Also, don't forget [www.militarymodelling.com](http://www.militarymodelling.com), the magazine's own popular website which has a vibrant forum covering every conceivable modelling subject.

'Carry On!'

**Martyn Chorlton**  
Contributing Editor

[contributor@militarymodelling.com](mailto:contributor@militarymodelling.com)

## Cover Story...

MAIN IMAGE: Gary Radford's superb 1/35 Revell LCM (3)

LEFT INSET: Impressive DANA self-propelled gun by Cristian Lupu

CENTRE INSET: Mark Bannerman's superb Churchill Bridgelayer

RIGHT INSET: 3D Printed M5 by Marcel Von Hobe







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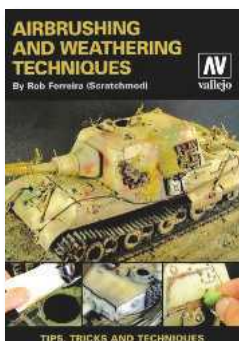
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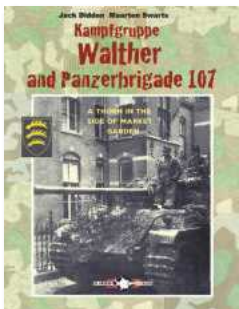
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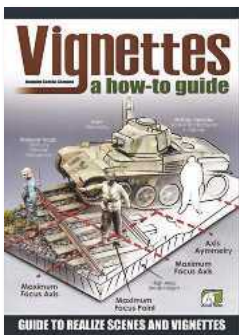
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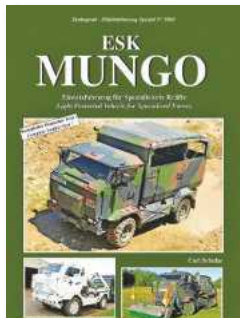
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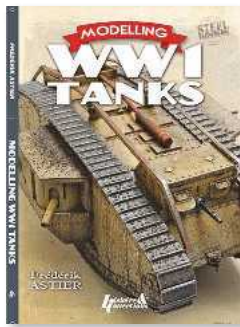
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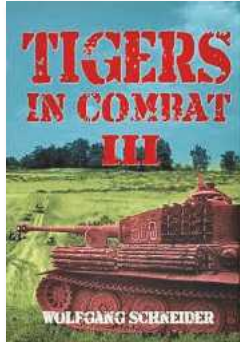
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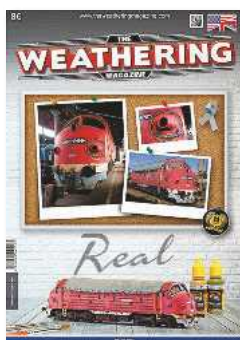
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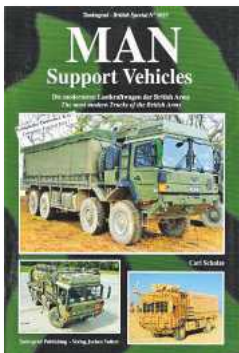
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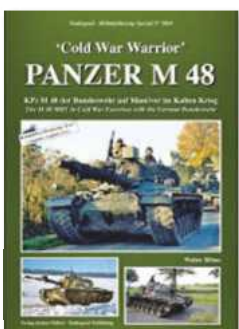
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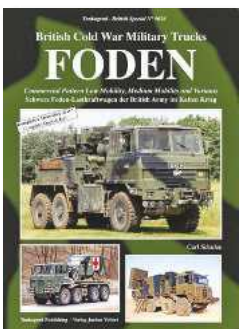
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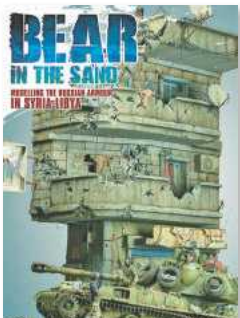
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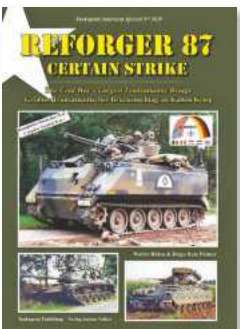
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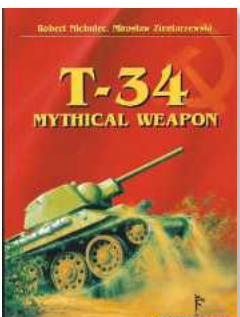
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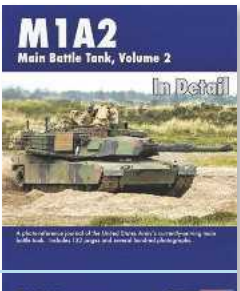
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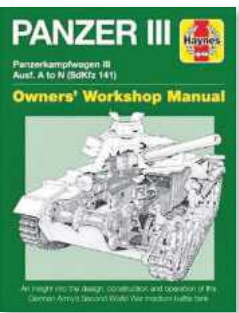
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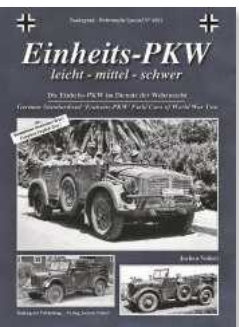
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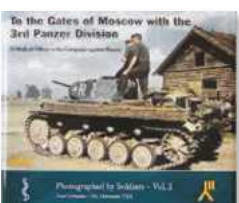
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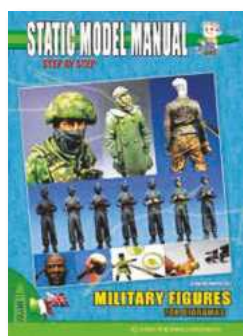


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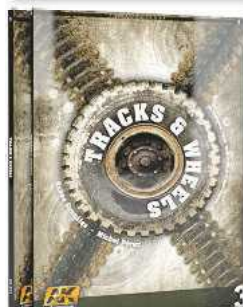
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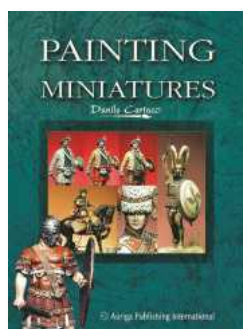
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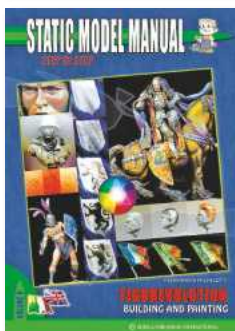
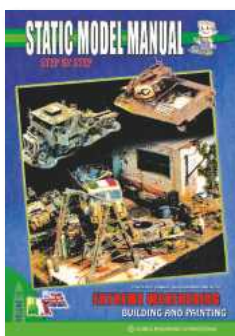
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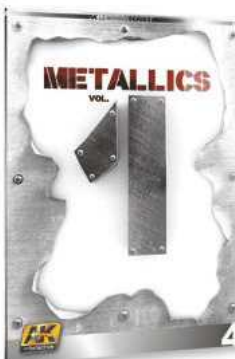
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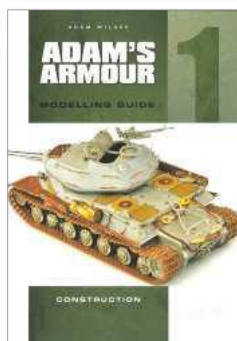
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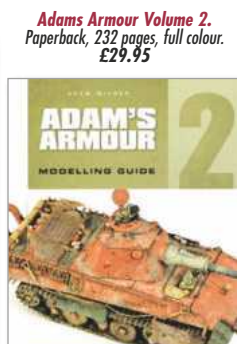
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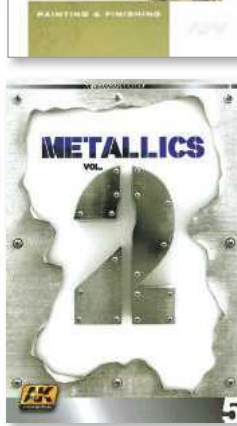
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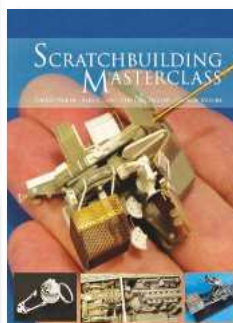
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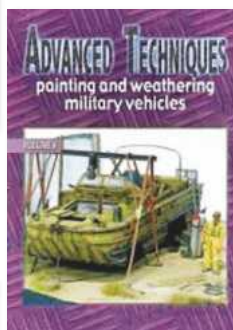
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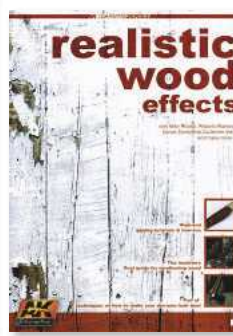


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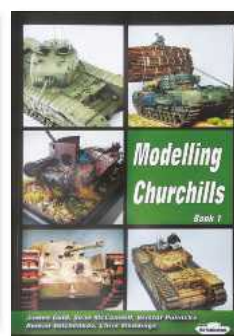
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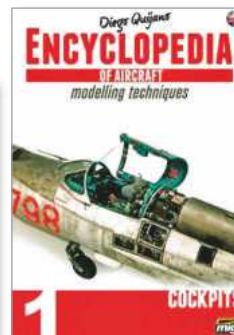
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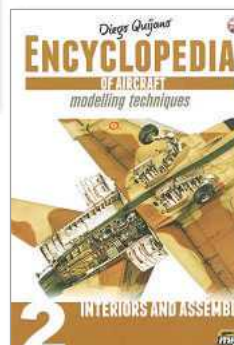


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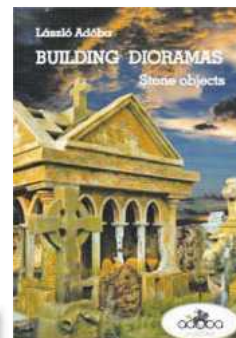
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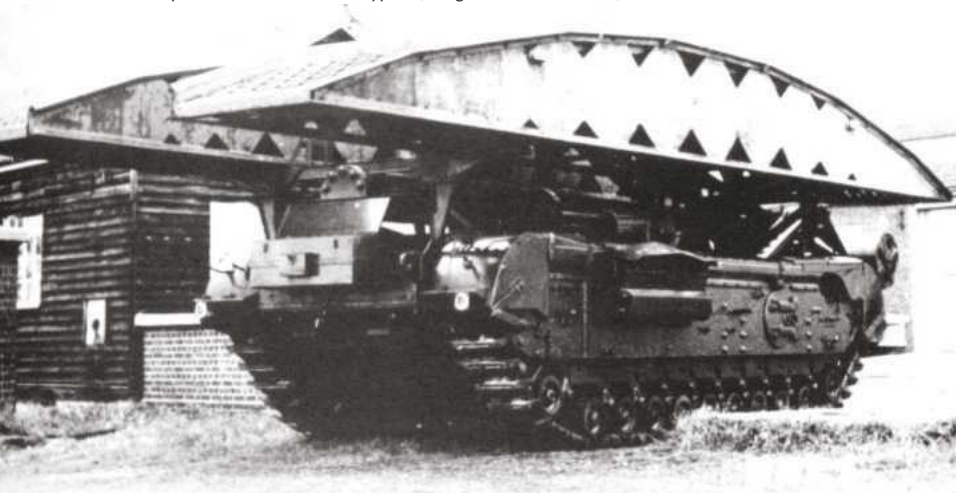


# 'Bridging the gap'

Modelling the Churchill Bridge-layer (Bridge, Tank, 30ft. No. 2)  
by **Mark Cooper** and **Mark Bannerman**

*ABOVE: Photoshop of the Churchill Bridge-layer moving into position.*

*BELOW: The bridge weighed almost five tons. This Churchill appears to be a late type retrofitted with various parts from earlier Mark types. (Image source unknown)*



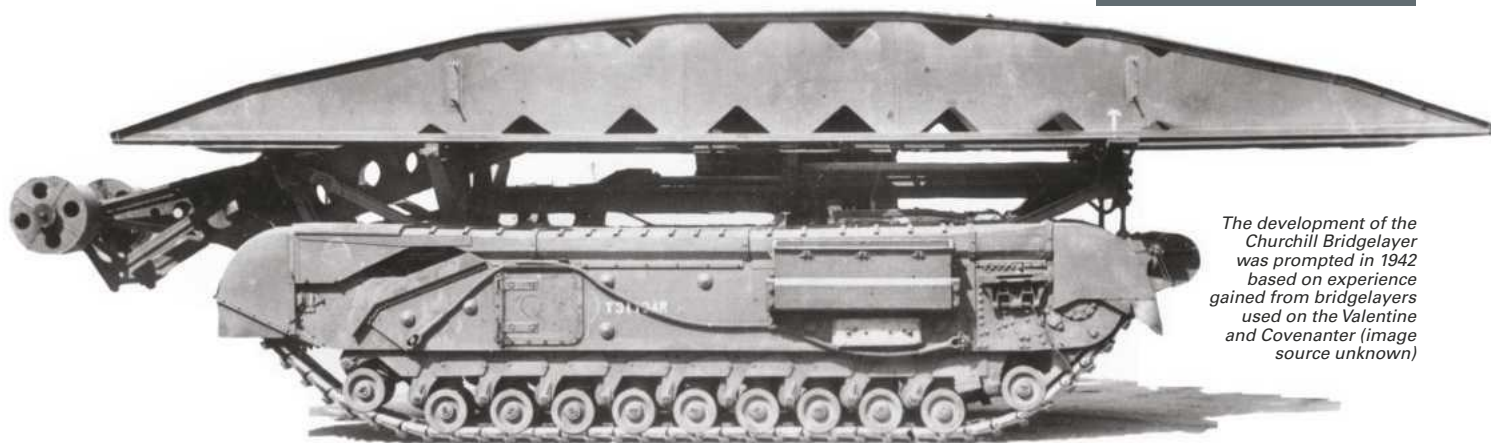
*ABOVE: The IMA conversion was designed for the Tamiya Churchill MK VII and several parts were included in the IMA conversion offering to backdate the Tamiya model to an earlier Churchill variant.*

## A specialist machine

Tanks for bridging purposes first made an appearance shortly after the First World War. The inter-war years produced many variants of specialised bridgelayer prototypes but it was not until 1940 that these vehicles were put into a combat role. The first examples included the folding Scissor Bridgelayer which was attached to the Covenanter and the Valentine. Further tests resulted in a one-piece type bridge attached to a Churchill Mk III or Mk IV tank (designated Churchill Bridge-layer) which were developed by either the Birmingham Railway Carriage & Wagon Co. or the Gloucester Carriage & Wagon Co. The purpose of the bridgelayer was to lay a bridge across a ditch or river to allow tanks to cross. The bridge was then remounted onto the Churchill for further deployment. This was unique in that all transportable bridges up to this point were expendable.

The bridge was 34ft long (the '30ft' designation represents the gap that the bridge could span), weighed almost five tons and could handle 60 tons of weight. The Churchill Bridge-layer was operated by a crew of two (Commander and driver/operator) and had a maximum road speed of 15mph. It was designed with two steel arc-shaped trackways of welded steel construction joined by diagonal cross-braces mounted on top of a turretless Churchill tank. Although the Churchill turret was removed, it was replaced by a small two-piece circular cover with welded cupola, access doors, a hinged roof and four vision blocks. To deploy, the entire bridge was lifted from its resting position and brought forward in front of the tank with a hydraulic-powered pivot arm mounted horizontally over the rear of the vehicle. The mechanism and engineering for deploying and retrieving a bridge was quite complex but, in its simplest form, the hydraulic system that was contained within the fighting





*The development of the Churchill Bridgelayer was prompted in 1942 based on experience gained from bridge layers used on the Valentine and Covenanter (image source unknown)*

compartment was operated by the driver using the Churchill's Bedford twin-six engine in conjunction with a clutch, a series of gears, pumps and shafts. One of the advantages of this particular type of bridgelaying device was that several safety mounted devices were incorporated, allowing the Churchill to deploy on uneven terrain and preventing the bridge from falling back onto the vehicle during the laying process or falling back to the ground during the recovery operation. It has been recorded that laying or recovering of a bridge could take as little as 1min 30secs with an experienced driver. A total of 99 Churchill tanks were converted into Churchill Bridge layers - 76 by Vauxhall Motors and 23 by Rushton Bucyrus. The Churchill Bridge layers were used in action both in Northwest Europe and in the Italian campaign until the end of the war.

## International Models Asia

The IMA conversion was designed for the Tamiya Churchill Mk VII and several parts were included in this offering to back date the Tamiya model to an earlier variant. We chose to proceed with the Tamiya model, although this conversion could equally be applied to the AFV Club kit or the Cromwell Models resin kit. The first step was to modify some of the Tamiya details to back date to an Mk III/Mk IV type. The IMA conversion provides a portion of the sponson with laser cut plastic and requires removal of a section of the Tamiya sponson plate. A simpler approach would be to remove all of the detail on the Tamiya sponsons with sandpaper and rebuild the details; primarily replacing rivets and bolts. The assembly of the roadwheels were followed as per the Tamiya instructions. The IMA conversion provides a replacement rear tool locker and rear hull plate and the entire driver's mantlet should also be replaced. The three front periscope units should be removed and the mud channel guides replaced with laser cut parts. The driver's hatches need to be glued down as these were not used and a new exhaust pipe provided by IMA replaces the Tamiya one. The IMA conversion also provides the early style air intakes.

The bridge deployment mechanism and gear for the upper hull of the Churchill has many parts and the instructions should be followed very carefully and in the correct order. The first step is to install the turret plate with the hatch on the right side (acrylic visors are provided in the conversion model). The right and left 'A' frames should be glued in place ensuring alignment with the pivot holes and top plate. It is very important to place this part correctly otherwise every addition thereafter will be skewed. The central cylinder support beam should then be affixed into place with 5-minute epoxy, along with the front slide rail bracket. Ensure that these fall on the centre line. The two rear cylinder



support brackets should be fitted on either side of the gear box hatches. The two front bridge support arms are then attached to the 'A' frame plates towards the front stops and square to the hull. The two deployment frames are mounted to the 'A' frame on two pivot pins. The bridge mechanism is assembled and glued onto the load wheel halves. The hydraulic cylinder rod is attached to the trim flange and fitted into the hydraulic cylinder. This all sounds very technical but the images provided with the instructions are quite clear and the drawings are very helpful. One word of caution; ensure that you follow the instructions in the synchronized order in which they are provided. The bridge beam was not a difficult build. There is an outside and inside rail and these should be identified early on. The inside rail has a pivot point and a link beam slot. A few important points; assemble on a flat surface to ensure that the rails and both beams sit absolutely

*ABOVE: The rear engine deck handles were shaved off and the entire front mantlet was replaced with the IMA resin offering.*

*BELOW: A Churchill Bridge layer on trials in England. The Churchill driver (who also doubled as the bridge operator) could, according to references, deploy a bridge from its resting spot into fixed position in 1min 40secs. (Image source unknown)*





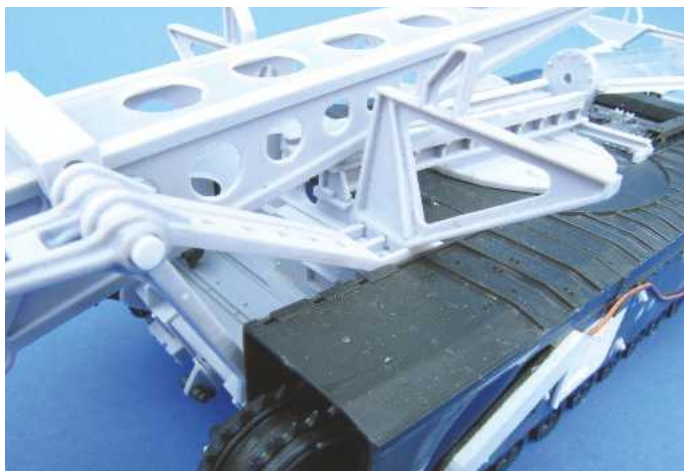


**ABOVE:** In the deployment of the bridge, the load wheels would be lowered and the bridge was lifted up over the top of the Churchill tank in an arc shape and lowered in front of the carrier tank.

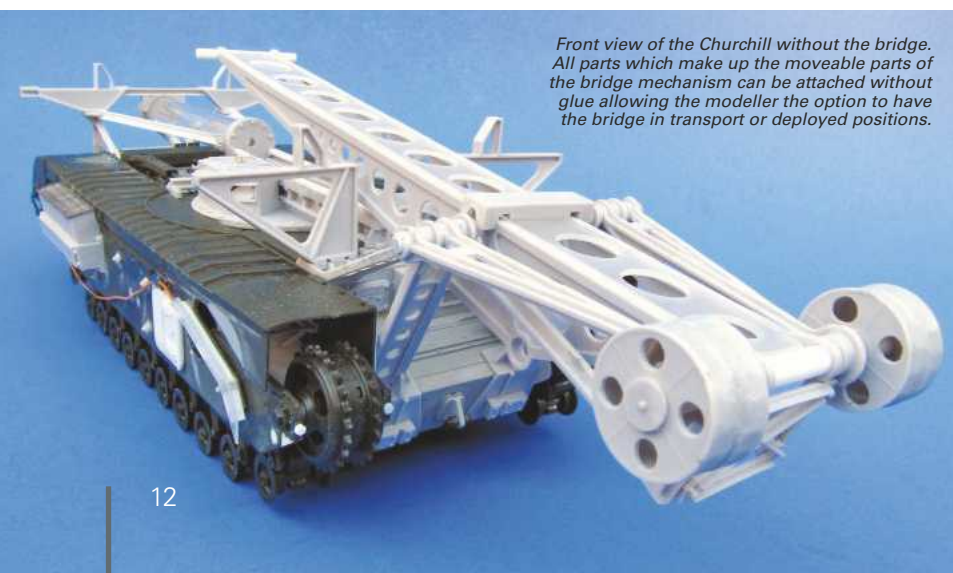
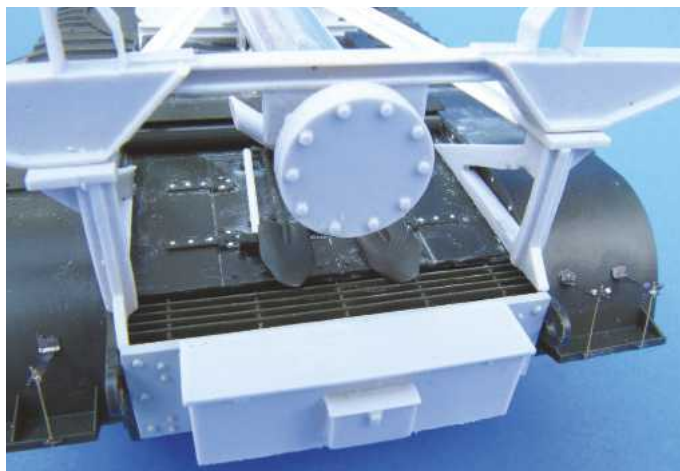
**LEFT:** The roadwheels in this image are incorrectly fitted - these will be switched towards the end of the project. This is an easy mistake to make! Tich Line bolts glued into place.



**ABOVE LEFT:** Although the side doors were scratchbuilt using sheet styrene, IMA does offer a resin versions to replace the Tamiya parts. Square hatch doors were used on all Mark types right up to and including the MK VI. **ABOVE RIGHT:** A clear view of the attachment point. The two deployment frames were mounted to the 'A' frame on two pivot pins. The bridge mechanism was assembled and glued onto the load wheel halves.



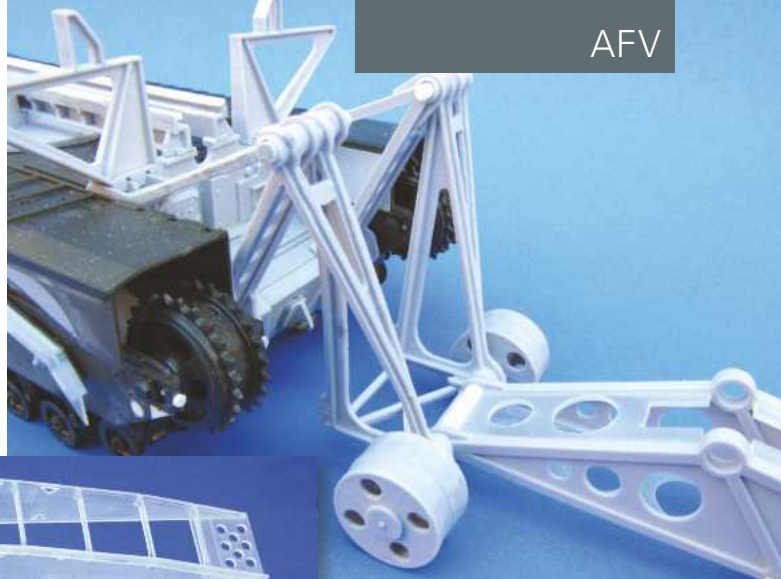
**ABOVE LEFT:** The rear half of the launching girder, roller frame and pivot bracket under construction. **ABOVE RIGHT:** Etch was used for the rear fender jerry cans. Note the replacement rear plate from IMA. The small box would have contained the first aid kit. The large box would have been used to store sledge and waterproofing equipment.



*Front view of the Churchill without the bridge. All parts which make up the moveable parts of the bridge mechanism can be attached without glue allowing the modeller the option to have the bridge in transport or deployed positions.*

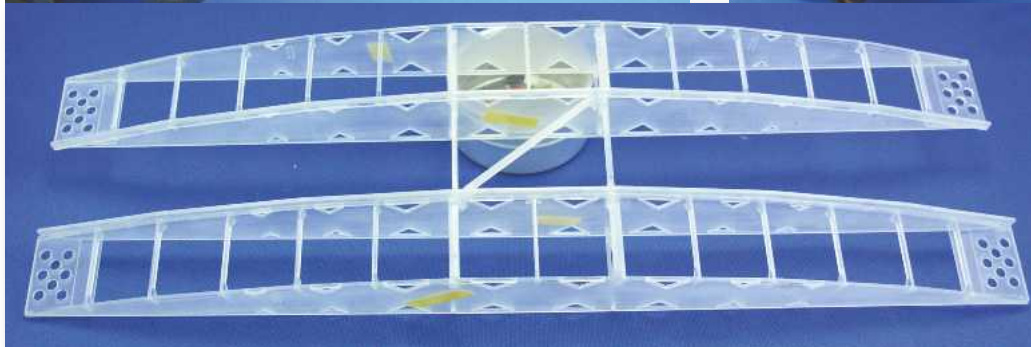
flush and parallel. The bridge beam is moveable and does not need to be permanently glued into place. The movement of the brass rod into the cylinder secures the bridge from slipping and the pivot pin on the arm allows for it to be moved in a transport or deployment position. Again, the instructions are very clear as to how the model should be built with black and white close-up drawings showing each step of the way. All of the resin parts are cast in a light grey resin, are extremely crisp and are highly detailed. The conversion is not an easy one because of the many steps but it is quite straightforward and one should have no difficulty with the building process. The only part that needs careful attention is the assembly of the frame. The frame needs to be at 90° angles so that it fits neatly onto the brackets.





ABOVE LEFT: Side view of the load wheels and roller brackets.

ABOVE RIGHT: Close-up view of the load wheels and brackets when the bridge has been fully deployed.



LEFT: The bridge frame assembled.

### Filters, thinners & wet pastels

For the painting and finishing process, the model was scrubbed over with soap and water all using an old toothbrush. The model was pre-primed in Tamiya White primer to provide purchase for the subsequent paint. This would also allow the base coat to be uniform in appearance. For the base colour, Tamiya paints were used; Tamiya Khaki Drab with Tamiya Olive Drab Khaki were mixed in an approximately 4:1 mix ratio. The entire model was airbrushed for a second time with same base coat but with 10% more Tamiya Khaki Drab added into the base colour to provide a slight contrast. The paint was sprayed lightly to all parts with an Iwata HP-B airbrush. With reference to markings, Churchill Bridgelayers were generally operated by parent Brigades and each brigade had three bridgelayers. For this model, we did find an excellent rear photograph depicting a Churchill Bridgelayers attached to a HQ of the 6<sup>th</sup> Guards Brigade. The shield and arm of service (a white '151' in a green square with a white bar underneath signifying Army Troops from an old tank brigade HQ) were sourced from Archer Fine Transfers and affixed to the front track fenders and rear plate. Once the transfers had been affixed, a light overspray of a Tamiya Flat Earth and Buff, mix was applied to

the entire model to bring a more muted finish to the vehicle. This was followed by two applications of filters. The first filter was Humbrol 84 mixed with 95% Testor's thinners and this was allowed to dry thoroughly. For the second, we used Winsor Newton Raw Umber mixed with 95% enamel thinners. One of the characteristics of filters is that the accumulation of paint in crevices may look a little unrealistic and this can be remedied by brushing out excess filter residue with clean thinners. Another option to remedy this problem is to apply a series of pin-washes. Pin-washes involve controlled and localized applications of washes along crevices and in shadow areas such as along seams. We applied one pin-wash using Raw Umber mixed with Lamp Black and Testor's thinners and applied to the model with a 'liner' brush. We ran the liner brush along all seams and around rivets. We also applied a few conservative drybrushing applications following a restrained approach with two drybrushing passes; the first with Humbrol 155 neat and the second with Humbrol 84. The key to drybrushing, regardless of your preferred approach, is to ensure that the brush is almost void of any paint. Rain marks are the result of dirt and dust that has run down the side of a vehicle after rain or high humidity. There are several methods for applying

*All of the resin parts are cast in a light grey resin, are extremely crisp and are highly detailed.*

BELOW: The Churchill and bridgelayers fully assembled. ▶▶



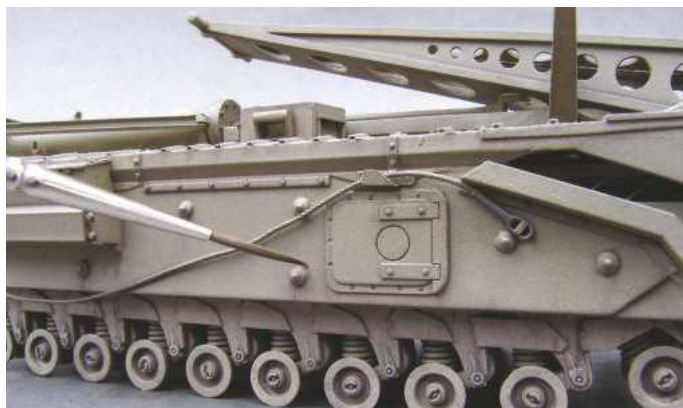




ABOVE: The model was then airbrushed with a small amount of Tamiya Gloss to protect the basecoat from subsequent weathering. For the markings, Archer Fine Transfers were used to depict a specific Churchill Bridge-layer attached to HQ of the 6th Guards Brigade.



ABOVE LEFT: The pastels were placed in those areas that would typically have more dust and dirt accumulation – notably the lower hull and running gear. ABOVE RIGHT: A liner brush was further used to outline details with pastels mixed with thinners.



ABOVE: The method we particularly liked for rainmarks involved combining Tamiya thinners and a mix of brown/black pastels. The pastels were diluted in thinners in a 1:4 ratio and applied using a liner brush.

rain marks and some are more risky than others. The method we particularly like involves combining Tamiya thinners and a mix of brown/black pastels. The pastels are diluted in thinners in a 1:4 ratio and applied using a liner brush. The brush is moistened with the pastel/thinner mix (not soaked) and the brush is then flicked in a downward motion from vertical edges in short strokes. It helps to mask off the upper edge surfaces to avoid build-up of the paint on the upper flat surfaces. Once this was complete, we started with the wet pastels technique. This technique calls for mixing black and brown pastels with Tamiya thinners (optionally with enamel thinners) and applying this mix on around nuts, bolts, along seams, crevices and shadow areas. This was the very same application as the pin-wash mentioned above but this process helps further accentuate shadows and, more importantly, provides a dirt-like texture in the shadow areas which creates a nice gritty effect.

## Another level of realism

Most photographs of Churchill Bridge-layers typically look dusty. The model looked weathered but needed more dirt and dust. We turned to using more pigments to denote dust. In moderation, this is a very effective means of bringing another level of realism to the model. The best way to proceed is to apply a small amount at a time, working in sections until it looks correct. The pastel powders were applied with a soft round brush and placed in those areas that would typically have more dust and dirt accumulation, notably the lower hull and the running gear. Most often, pastels applied to models become susceptible to handling. To remedy this and to make the pastels more permanent, we applied Tamiya thinners to the model and allowed them to capillary on the model's surface. The approach is to apply the thinners to the upper edges of the vertical surfaces and allow it to run downwards so that it catches the pigments, dilutes it in the process and then evenly spreads the pigmentation mix to the lower part of the model. The trick is not to let the brush touch the pigments directly but rather to allow the capillary motion (and gravity) of the thinners to do the work for you. For horizontal surfaces, we airbrushed Tamiya thinners on the flat surface to seal the dust in place. To attain a more heavily weathered effect, may require several applications of dry pigments followed by a dosing of Tamiya thinners.



LEFT: The tracks were primed in Tamiya White primers, airbrushed in a mix of Tamiya Dark Grey and Flat Brown, a wash of Raw Umber and Lamp Black oil paints and were then given a light airbrushing of Tamiya Flat Earth.



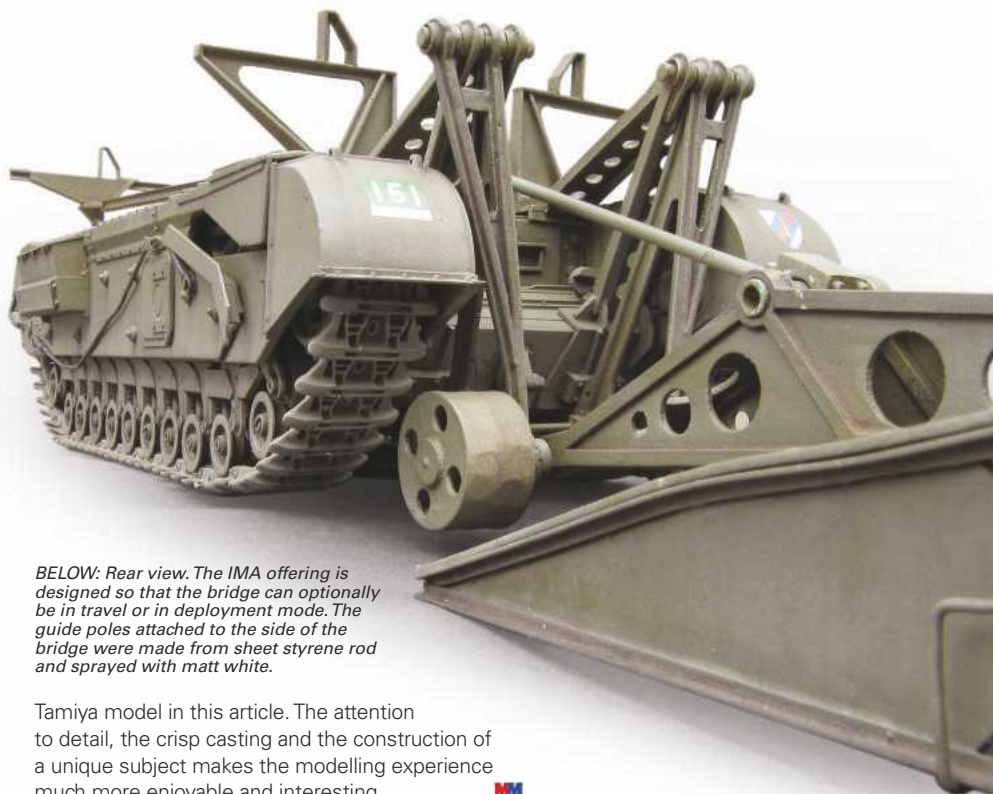
For the tracks, the vinyl offering could not hold the Tamiya primer. Oddly, the primer would just crack off, so we opted to use Fruilmodellismo tracks specifically for the Churchill tank. The tracks were assembled using the wire included with the Fruil tracks. The easiest manner to build these is to line up the tracks, insert the wire then tab a small amount of super glue onto it to hold the wire in place and snip off the excess. The tracks were first primed in Tamiya White primers and airbrushed in a mix of Tamiya Dark Grey and Flat Brown. The tracks were given a liberal wash of Raw Umber and Lamp Black mixed with Testor's thinners. To ensure that the tracks duplicated the dusty appearance of the lower half of the Churchill, they were given a light airbrushing of Tamiya Flat Earth. Lastly, an application of MIG Pigments 'European Dust' was brushed onto the tracks with a wide brush and then airbrushed with MIG Pigment Affixer. A substitute for the Affixer could be Tamiya thinners. We also added a few more washes of Raw Umber oil mix with enamel thinners onto the tracks to provide further depth in the tracks. Once this had completely dried, we airbrushed another light coat of Tamiya Dark Brown over the tracks and the lower part of the Churchill to develop more uniformity between the track and the hull. The mix was a much-diluted paint with 80% thinners. The final touch was adding the hinged arms on the sides of the bridge using sheet styrene rod painted in a mix of Tamiya White and Buff. The hinged arms were used to help guide vehicles across the bridge. The cables on the side of the Churchill were sourced from Accurate Armour.

## Conclusion

This was a moderately difficult conversion to build and required some modelling expertise. However, the project would be much easier if time was dedicated to studying the parts and respecting the chronological order and measurements outlined in the instructions. While the Tamiya Churchill is an option, we would recommend using the AFV Club or Cromwell Models versions simply because these are more accurate to the Churchill Mk III to IV series. The Tamiya kit requires many adjustments; certainly many more modifications than we had applied to the featured



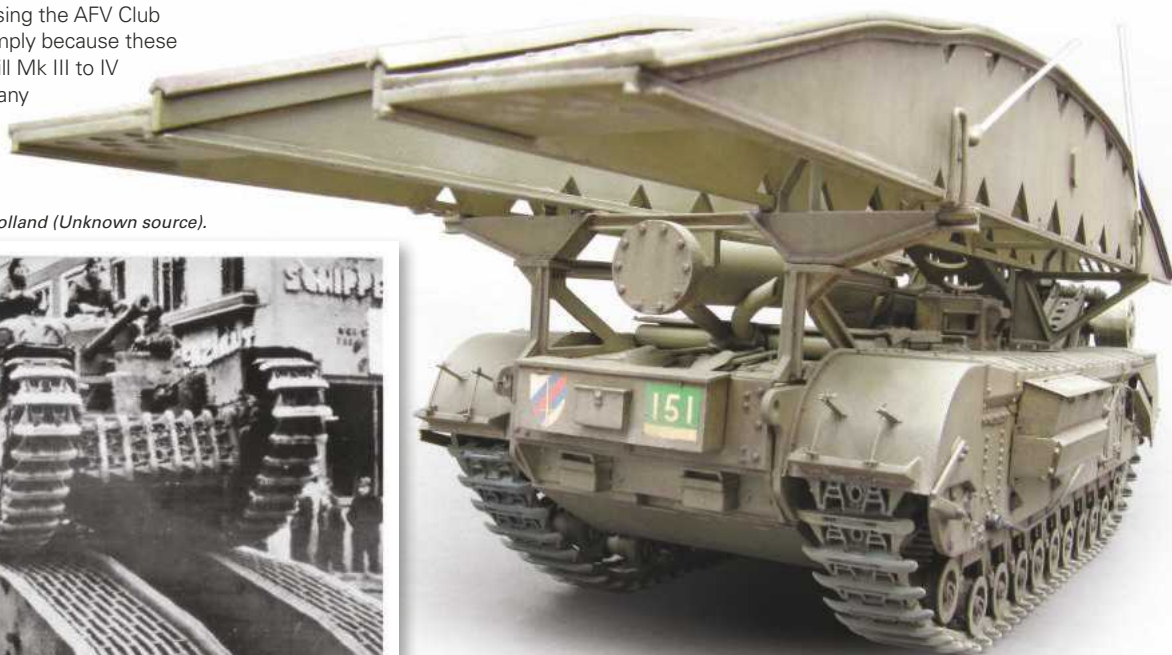
ABOVE: Wartime Photoshopped of the author's Churchill Bridgelayers model.



BELOW: Rear view. The IMA offering is designed so that the bridge can optionally be in travel or in deployment mode. The guide poles attached to the side of the bridge were made from sheet styrene rod and sprayed with matt white.

Tamiya model in this article. The attention to detail, the crisp casting and the construction of a unique subject makes the modelling experience much more enjoyable and interesting.

BELOW: Bridge down - Belgium or Holland (Unknown source).







## Revell 1/35 British LCM (3) by **Gary Radford**

### The 'New Noah'

Andrew Jackson Higgins (August 28, 1886 – August 1, 1952) was the founder and owner of Higgins Industries, the New Orleans-based manufacturer of 'Higgins boats' during WW2. The company started out as a small boat-building industry but later became one of the biggest engineering enterprises in the world. The success of their boats ensured that Higgins Industries would be a major employer during the war. A workforce of only 75 workers in 1938 grew to over 20,000 by 1943. By the end of WW2, it is reported Higgins Industries employed upwards of 80,000 workers and government contractors.

The Higgins workforce was the first in New Orleans to be racially integrated. His employees included undrafted white males, women, African Americans, the elderly and the disabled. All were paid equal wages according to their job rating. They responded by shattering production records, turning out more than 20,000 boats by the end of the war. It is said that more than 96% of US Navy ships were 'Higgins boats'. General Dwight Eisenhower is quoted as saying, "Andrew Higgins ... is the man who won the war for us.... If Higgins had not designed and built those boats we never could have landed over an open beach. The whole strategy of the war would have been different." Adolf Hitler recognized his heroic war efforts in ship production and bitterly dubbed him the 'New Noah.'

One of his many designs was the LCM (3) Landing Craft Mechanised Mark 3. These craft were 50ft in length by 14ft across the bows and were driven by two diesel engines producing up to 450bhp with a speed of between 8-11kts. The relatively small craft was intended to land one 30 ton tank or 120 combat troops in a hostile environment. It was a most practical vessel as when its initial goal had been achieved, it could be used to transport the wounded back to waiting hospital ships and bring supplies of food, ammunition and fuel to shore; in other words, it was a water-born truck. This was quite relevant once the Mulberry Harbours came into full operation after the initial D-Day landings on June 6, 1944. Many LCM (3)'s served with the Royal Navy and Royal Marines under the American 'Lend-Lease' scheme but, unlike the American version, which was armed with two .50cal heavy machine guns, the British craft did not carry any armament. Protection was provided in the form of bullet proof mattresses wrapped around the wheel house. These mattresses were discarded once the beach was secure because of their weight; without them, the LCM's could carry more supplies ashore.

### Construction

The assembly of the LCM starts with the underside of the hull, principally the prop shafts, propellers, and rudders. These elements all fit within the confines of the hull to give them protection when operating in shallow water. A small amount of filler was needed around the joints as you can see in the

# Normandy Work Horse



The Revell dramatic box art.





*RIGHT: The finished British LCM (3) Landing Craft from Revell.*

pictures. Some of the mould seams were a little on the heavy side and needed refining. The hull comes as a single moulded item and as such has smooth sides. Looking at reference material it would appear that the sides of LCMs were anything but smooth. I remember reading an article some years ago where the builder had added the detail to the hull but as usual I could not find the magazine in time for this article. In March of this year, I attended the local Hinckley show in Leicestershire and while there I saw a part built LCM by Peter Bowyer of M.A.N Models and founder of The Mulberry Harbour sig. He had added the ribbing to the side and was quite willing to share the technique with me.

I started out by marking the sides and stern with the general pattern then added the detail using plastic strip. When thoroughly dry I covered the sides with Aluminium Thermo Wrap Self-adhesive foil tape which I obtained from Homebase Store for just over £5; this comes on a roll which is 50mm by 50m (the depth of the hull is approximately 48mm). I simply laid it over and then gently burnished it into place with my fingers. When I was happy, the excess was trimmed off and the edges burnished down.

I wanted to depict my LCM as one being used by British Combined Operations forces operating some days after the D-Day landings. As I have mentioned, the British craft did not have any armament to protect them, apart from the bullet proof mattresses. In the Revell kit, the deck comes with the machine gun mounts moulded on it. I used the original part and transferred the measurements on to paper. Having made a template, I made sure it fitted over the moulded parts and, once happy, I taped the template to the underside of a section of photo-etched tread plate produced by Accurate Armour and supplied by M.A.N Models ([www.manmodels.co.uk](http://www.manmodels.co.uk)) and cut out the relevant holes. I then sanded the detail off the kit part and fixed the tread plate in place with two part epoxy resin. A small amount of filling and sanding was needed around the edges to tidy it

*BELOW: The hull fitted out with plastic strip to simulate the ribbing effect common on LCM's.*



*ABOVE: Rudders fitted. You can see on this picture that filler is needed to hide the gaps in the mouldings.*

*BELOW: A picture of two LCMs taken after the war which shows the ribbing effect on the hull.*

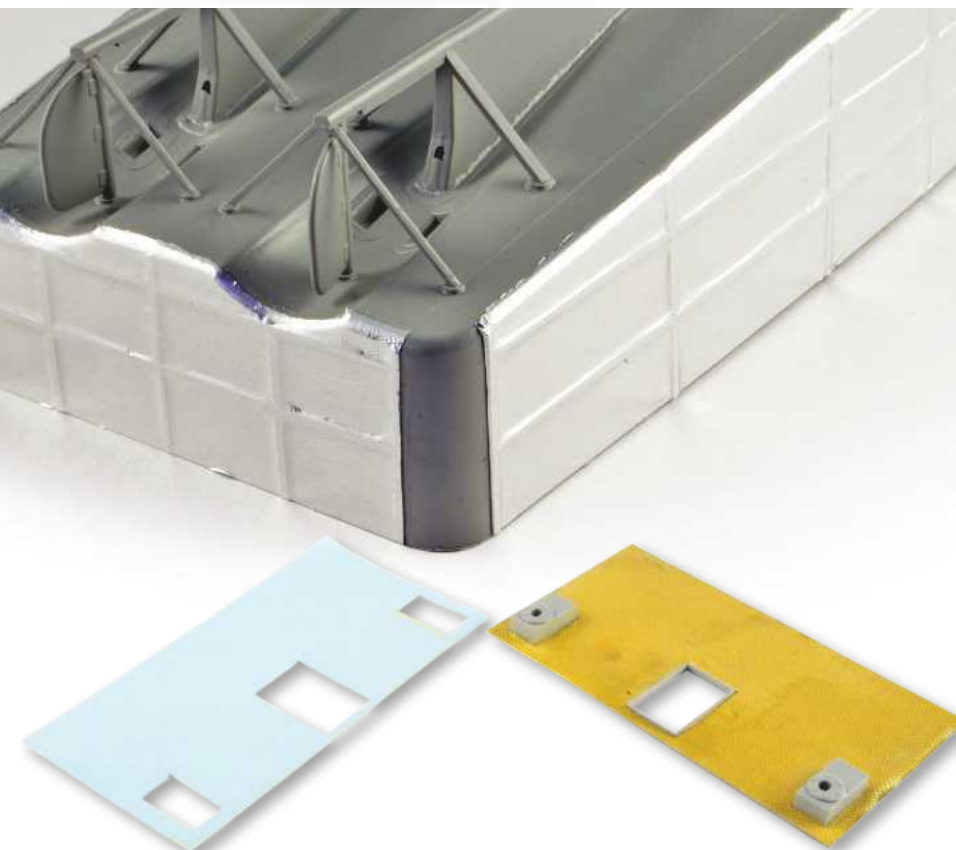






*ABOVE: The Therma wrap self-adhesive foil tape added to the hull sides.*

*BELOW: The edges trimmed but not burnished down at this stage.*



*ABOVE: The paper template and the cut tread plate fitted in place on the original kit moulding.*

*BELOW LEFT: Aluminium tubing was used to simulate the exhaust and water pump outlets.*

*BELOW RIGHT: Here the cargo well end wall has had the holes filled in where the American type steps would have been fitted.*



up. While that was drying I marked out and drilled the holes in the side of the hull for the exhaust and water outlets. These were made from small sections of aluminium tube held in place with thick superglue. Another difference between the British and American craft was the ladder from the cargo deck to the main deck; the American craft had steps welded onto the rear bulkhead of the deck but the British craft had a 'Swan neck' ladder fitted to one side. The holes in the bulk head were filled and sanded and a new ladder was made from brass rod soldered together and bent to shape.

The cargo well can be assembled as a separate unit, the reason for this is that the ramp operating cable runs down one side of the craft under the main deck and then down the other side of the craft. I removed the two side walls and the rib sections that fit to them. I noticed there were a number of 'knockout' pin marks in all surfaces and, if left, they would clearly be seen when painted. These marks were filled with Deluxe Perfect Plastic Putty and, when dry, were sanded smooth. The sides were then attached to the well floor and then the main deck was added. When this assembly had dried, the converted deck was added and holes were drilled to accommodate the brass ladder. At the same time, I added all the deck sundries such as vents and bollards, etc.

The next item to be constructed was the wheel house which, on the LCM (3), was a simple box for want of a better word. The five major parts were cleaned up and assembled but, before the parts were dry, I positioned it in place on the deck to make sure that it was aligned. Detail inside the wheelhouse is sparse, consisting of a foldout seat, a small shelf and a control box with the throttles and wheel. The instrument panel detail on the control box comes as a decal although Eduard do make a Photo-etch set which contains a PE panel. There is a fire extinguisher that fits to the port outside wall and two lifebuoys that fit either side; I should imagine these were used on a regular basis considering the amount of trip hazards on the deck and there being no safety rails.

The modeller has the choice of having the large front ramp in the open or closed position. This is determined by the arrangement of the cable union joint which can be fixed in one of two locations inside its housing. The ramp door itself comes in two parts and will require some cleaning up to remove heavy mould seams from around the edges. Once I was happy with the fit of the parts, the LCM was made ready for painting.

## Painting and weathering

The first thing I did to get everything an even colour was to spray the whole kit in Halford's Grey Primer. Next, I applied a coat of white, as the LCM was painted in Western Approaches (WA) White and WA Blue. When this was dry, I then masked off the white areas and sprayed on the blue. After a bit of research on nautical web sites it was found that Hobby Color H418 RLM78 Light Blue with a touch of Light Grey was a good match. With this information on hand, the

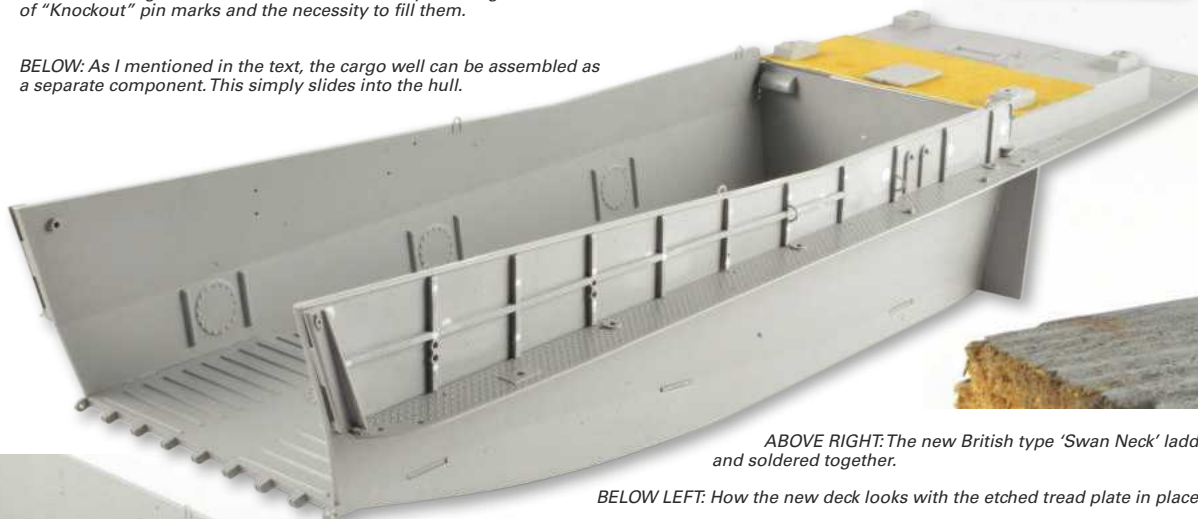






ABOVE: The cargo well sides and rib detail clearly showing the amount of "Knockout" pin marks and the necessity to fill them.

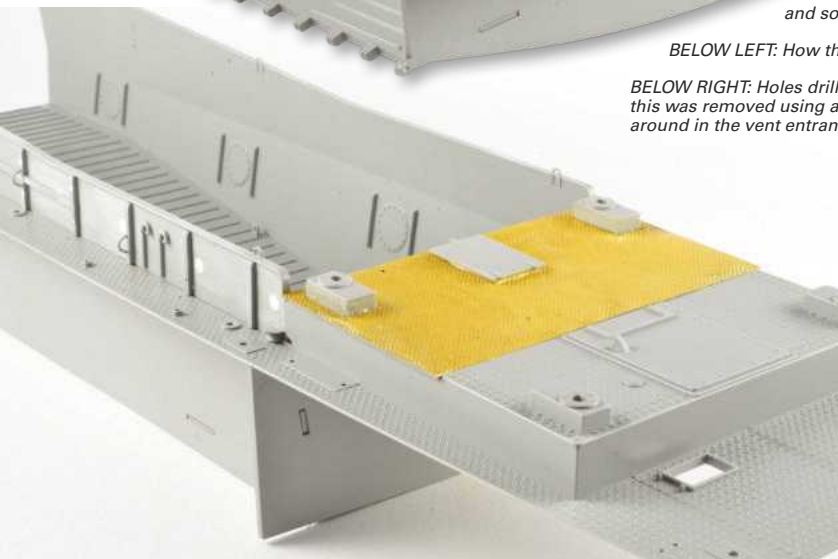
BELOW: As I mentioned in the text, the cargo well can be assembled as a separate component. This simply slides into the hull.



ABOVE RIGHT: The new British type 'Swan Neck' ladder made from brass wire and soldered together.

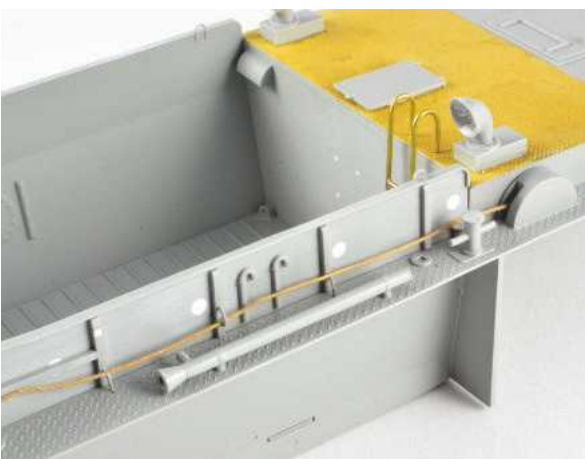
BELOW LEFT: How the new deck looks with the etched tread plate in place.

BELOW RIGHT: Holes drilled in the deck and the ladder fitted. The air vents still have filler inside them, this was removed using a damp cotton bud and basically twisting it around in the vent entrance.



blue areas of the craft were sprayed. I then left it for a day to completely dry before applying a coat of Johnson's Kleer ready for the decals. At the moment, there are no decals available for 1/35 landing craft let alone British landing craft. However, I remember a review on the Military Modelling web site [www.militarymodelling.com](http://www.militarymodelling.com) of Dan Taylor's British Minor Landing Craft Markings in 1/76 which can be found at [www.dantaylormodelworks.com](http://www.dantaylormodelworks.com). I got

BELOW: The ramp operating cable which runs down one side of the craft, under the deck and back down the other side to the ramp.



in touch with Dan, who very kindly scaled up the version I required and sent it to me. All I needed to do was print it onto ink jet decal paper and, when dry, spray it with a couple of coats of varnish and apply in the usual manner. The decals were sealed in place and then given a coat of Matte Varnish by Vallejo. With the decals now firmly in place, the weathering could begin. As these vessels were used as much as possible to carry supplies to and from shore, they soon became very battered, especially during the storm on June 19, 1944 which wrecked the American Mulberry A harbour. I decided that I would depict the LCM looking a bit worse for wear. First of all, I gave the whole thing a very light coat of Vallejo 70.941 Burnt Umber basically to tone down the stark white and help blend the two colours together. Once this had dried I applied chippings to the surface using Panzer Aces 302 Dark Rust. This was done by placing a small amount of the paint on a pallet, dipping a sponge in it and dabbing the excess off on kitchen towel. The sponge was then stippled over the surface to represent the chips in the paintwork. I then mixed up a very weak solution of AK Interactive Rust



ABOVE: The five main components that make up the wheelhouse.

BELOW: The walls of the wheel house assembled.







ABOVE: The cargo well and hull finally assembled together.



ABOVE: The hull with its coat of grey primer which brings all the parts onto a level playing field.



ABOVE: After careful masking the white followed by the blue were sprayed on.



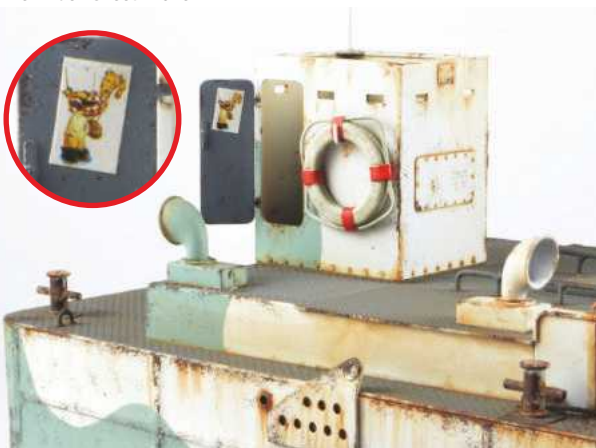
ABOVE: A covered cargo was made from expanded polystyrene covered with facial tissue paper held in place with PVA wood glue and water. When dry, it was sprayed dark green and then dry brushed using Humbrol 72.

BELOW: The weathering began with a very thin coat of Vallejo Burnt Umber, followed by chips produced by the Panzer Aces Dark Rust and rust streaks formed from the splendid AK product.



ABOVE: The decals from Dan Taylor were fixed in place and sealed with Johnson's Klear.

BELOW: The wheelhouse finally finished with 'Pin up' poster on the inside of the door. This was taken from an old Verlinden sheet I have.



Streaks (AK013) and odourless white spirit and applied this as a wash using a large soft brush. The LCM was then put aside again to totally dry. Using the AK013 straight from the jar, I applied small amounts to the edges of the deck etc. and around some of the larger chips. This was left to dry for about an hour or so, streaks were made by using a soft flat brush moistened with white spirit





and, using a downward motion, an accurate result was attained. To finish off, I added a cargo of crates and a couple of oil drums which were made from expanded polystyrene, the oil drums being fixed to it with PVA wood glue. The entire thing was then covered in facial tissue and fixed in place with PVA diluted with water. When dry, I sprayed it dark green and dry brushed with Humbrol 72 Khaki Drill. The two propellers were primed and then sprayed in Alclad Polished Brass before being fitted in place.

For the main cargo, I built an IGB 1/35 Chevrolet C60S Petrol Tanker; what a lovely kit this turned out to be. There was very little in the way of flash, there were very fine mould seams and the fit of the parts was first class. Also, on the plus side, you get two versions of cab with the kit; all in all you almost get two trucks in one box. Ok, it's not Tamiya, but for the price and the quality it's getting very near. As the LCM was operating on *Juno* beach, I used the Canadian markings on the Chevrolet.

To finish the LCM (3) off, I added two figures, one on the main deck and a driver in the well checking his map before driving ashore. I decided to mount it on a wooden plinth and added a name plate with the Combined Operations emblem and the White Ensign printed on it. The plate was produced by Brian O'Donoghue, more information can be gained at [info@mojoimagery.co.uk](mailto:info@mojoimagery.co.uk)

## Acknowledgments

First and foremost, I would like to thank the Contributing Editor of Military Modelling, Martyn Chorlton, for supplying me with the kit. I would also like to thank Peter Bowyer of M.A.N Models for all his help

*The IGB 1/35 Chevrolet C60S Petrol Tanker which I had previously made specifically for this build.*



**LANDING CRAFT MECHANISED  
LCM (3) JUNO BEACH  
JUNE 1944**



and assistance along with Dan Taylor who without his help with the decals, the project would have stumbled and, last but not least, Brian O'Donoghue for the name plate; thank you all gents.

*ABOVE: The name plate made by Brian O'Donoghue.*

*BELOW: The author's completed model on its display stand.*





# 'En route to Berlin' April 1945

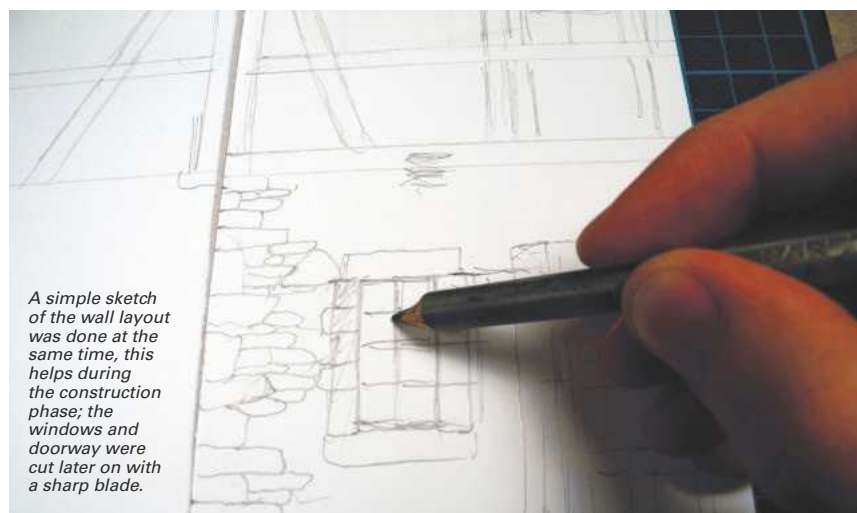
**Radek Pituch** takes us through the build stages of his impressive Red Army diorama

Part 1 to be followed by views of the finished diorama in Mil Mod Vol.47 No.7

ABOVE: The author's completed JS-2 tank with crew and one of the support figures ready to be placed on the road to Berlin...



ABOVE LEFT: Kapa foam (as per text) used to build the mock-up of the house. ABOVE RIGHT: Gluing the parts with a Velpen 'glue all'.



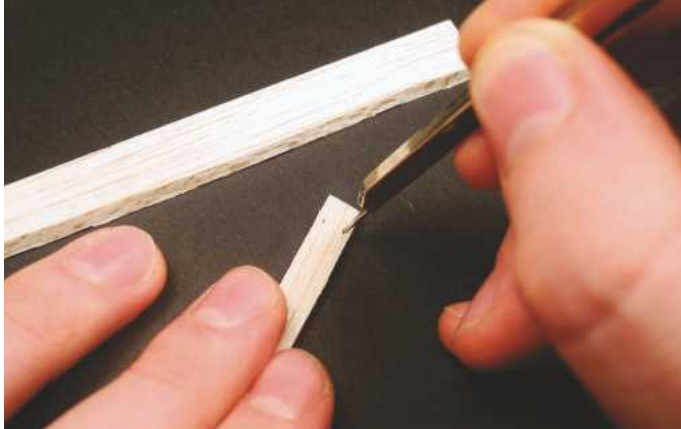
A simple sketch of the wall layout was done at the same time, this helps during the construction phase; the windows and doorway were cut later on with a sharp blade.

## Setting the scene

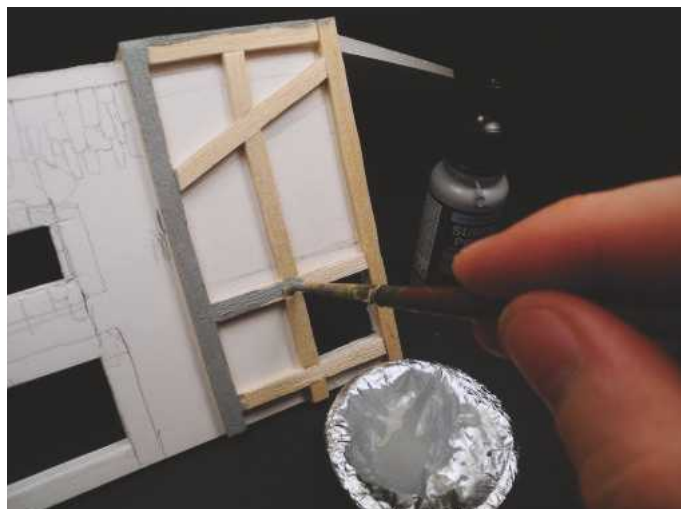
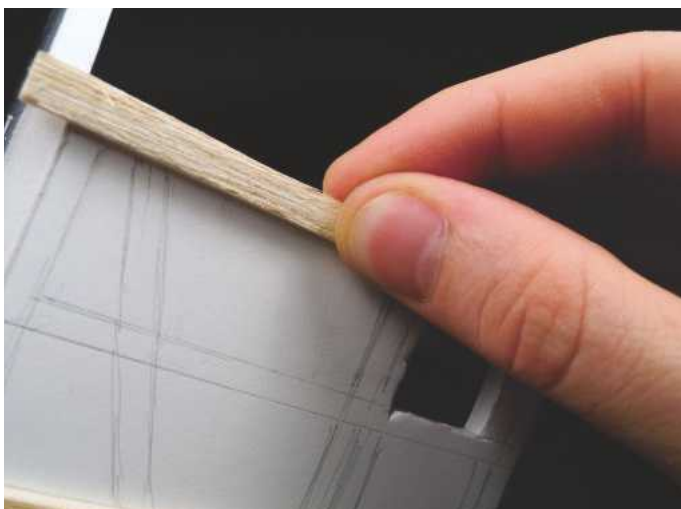
Following the Vistula–Oder Offensive of January/February 1945, the Red Army had temporarily halted on a line 60km (37miles) east of Berlin. When the offensive resumed on April 16, two Soviet fronts (army groups), attacked Berlin from the east and south, while a third overran German forces positioned north of Berlin.

Before the main battle in Berlin commenced, the Red Army encircled the city after successful battles of the Seelow Heights and Halbe. On April 20, 1945, the 1st Belorussian Front led by Marshal Georgy Zhukov started shelling Berlin's city centre, while Marshal Ivan Konev's 1st Ukrainian Front had pushed from the south through the last formations of Army Group Centre. The German defences were mainly led by Helmuth Weidling. The units consisted of several depleted, disorganised Wehrmacht and Waffen-SS divisions, along with poorly trained Volkssturm and Hitler Youth members. Within the

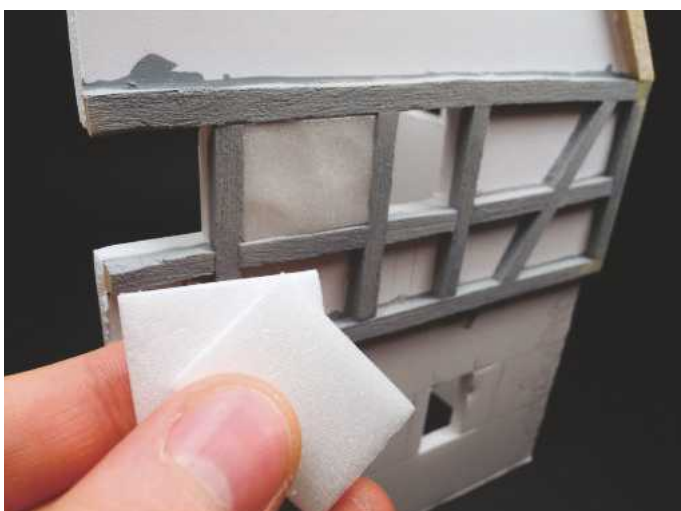




ABOVE LEFT: A pointy tool used to prepare holes for nails etc. ABOVE RIGHT: Puzzle glue (Magic Glue) is used to glue the parts together to the kappa foam made house walls.



ABOVE LEFT: Note the beams are overlapping on the corners. ABOVE RIGHT: Applying Vallejo primer grey with a brush. Once dry, I gently sanded down the beams to give them a more even finish.



next few days, the Red Army reached the city centre where close-quarters combat raged.

At this time, amongst, many units fighting around and trying to reach Berlin was the 33rd Waffen Grenadier Division of the SS 'Charlemagne' (1<sup>st</sup> French). The division was formed in 1944 from a collection of troops serving in other French Units of the German Armed Forces as well as from paramilitary groups such as the 'Franc-Garde' of the Milice or French Police Units serving with the German Forces overseeing the occupation of France. The unit took heavy losses in March 1945 while facing the advance of the 1<sup>st</sup> Belarusian Front in Pomerania. Most of the division troops were wiped out during severe combat; only a handful of 700 men, under SS-Brigadeführer Gustav Krukenberg, managed to withdraw. The unit, reduced to two battalions, found itself north of Berlin at Neusterlitz, when it was ordered to march towards Berlin to

bolster the garrison in the city. Krukenberg decided to split the troops into two parts, leaving more than half of the men to serve in a construction battalion and taking the rest of the force, around 350 men, with him to Berlin. They reached the city on April 24, 1945. The unit was one of the last to surrender in the Battle for Berlin, defending the Führerbunker and putting up a fierce fight with the Soviets. That's the true historical background.

My story, fictional by all means but based on probable historical events, starts somewhere just before the arrival of the French SS Sturmabteilung in Berlin during their struggle to pass the advancing Soviet columns, among them the 88th Independent Guards Heavy Tank Regiment. As the battalion tried to reach Berlin, one of the groups found themselves overrun by an advancing armoured spearhead of the Guards' JS-2 tanks accompanied by recon troops in their characteristic amoeba camouflage overalls. The

ABOVE LEFT: In areas where I planned no damage to the walls, Depron foam was glued in place between the beams.

ABOVE RIGHT: Thick dried grass stalks were cut and used for the straw/cane filling attaching them one by one.



## Diorama



ABOVE LEFT: All applied, partially primed, the roof section is under construction as well. ABOVE RIGHT: Masking the beams – thin plaster will be applied shortly.



ABOVE LEFT: After applying the plaster with a spatula I removed the masking tape.

ABOVE RIGHT: Almost dry and ready for further steps – more priming.

BELOW: Stone wall section of the ground floor almost completed, roof section revised at this stage.



recon troopers have captured three Frenchmen and already shot two of them on the spot, leaving only the officer alive for interrogation. In the meantime, one of the tanks of the Regiment has arrived and the crew discusses the nearby situation with the recon squad leader while others guard the still alive SS man. For a long time I had wanted to build a scene like this, i.e. German countryside with their characteristic stone and Fachwerk built houses (wooden frames filled either with bricks or straw and clay covered with plaster). The other thing I wanted to model was a Battle for Berlin period-based scene, not located in the city itself; I found that more interesting than the usual 'German last stand' style dioramas that we often see. The first thing to be done, besides the historical research about the battle and units involved, was to research the Fachwerk style. I had the opportunity to see such houses while visiting Lower Silesia in Poland, where many are built in this style. Lower Silesia was German land for 200 years before it re-joined Poland which was after 1945. Now all that remained was to figure out the right composition for the scene. I decided to use a square base for a compact



These are the 'Italian' stones I collected at a beach in Italy, to be used for the cobblestone road.

look. The house was supposed to be relatively big to show the typical features of the German rural architecture so I had to balance the composition with tank and figures. I also decided for a slightly sloping terrain towards the right side, where the







ABOVE LEFT: Each stone was glued in place, a tedious but effective way of doing it. ABOVE RIGHT: First I applied a layer of neutral colour wash to better see the layout of the stones, later on these were painted one by one with Vallejos.



ABOVE LEFT: Applying Vallejo Dark Earth paste to fill all the gaps between the stones. ABOVE RIGHT: Removing the excess either with a sponge or wet paper towel; this should be done gently.



POW was supposed to stand. Thus I got an even more dramatic appearance of the situation and the Soviets were dominant in the composition because they were standing on a higher ground.

## The building

Since this material covers only the diorama build part, I will not focus too much on the JS-2 tank. The construction of the house was completed first by cutting pieces of Kapa foam (under this name I buy the material in Poland, it's a Depron foam layered on both sides with paper; a variety of thicknesses are available). Using this material, I built a mock-up of the house and the main structure which was later covered with another layer of materials. Before this was done, I sketched a more or less desired look of the sections over the house mock-up to check proportions and to give me orientation during later

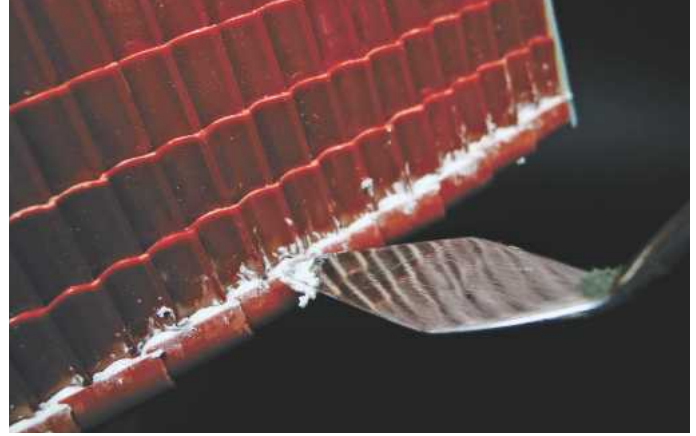
stages. For the Fachwerk construction I used balsa wood. Thick sandpaper was used to give texture and a worn appearance. The ground floor's walls were made of stones, as were many of the houses seen in the German towns and countryside. The stones were made of Depron foam again, cut into irregular shapes and slightly crushed in my fingers to give them a rounded shape. All this was glued into place with a puzzle glue (white glue that sets into a transparent form after drying, water dilatant). All the parts at this stage were primed with acrylic primer from the Ammo range. Spaces between the wooden logs were filled either with Depron (where I didn't plan any damage to the structure) or filled with wood putty and thin sticks to represent the structure of the Fachwerk walls (so clay and fascine filling) where I planned to inflict any damage. At this stage, I masked all of the parts of the wooden Fachwerk structure. The next stage was to apply

ABOVE LEFT: The same material (Vallejo paste) used for the groundwork on the sides of the roadway.

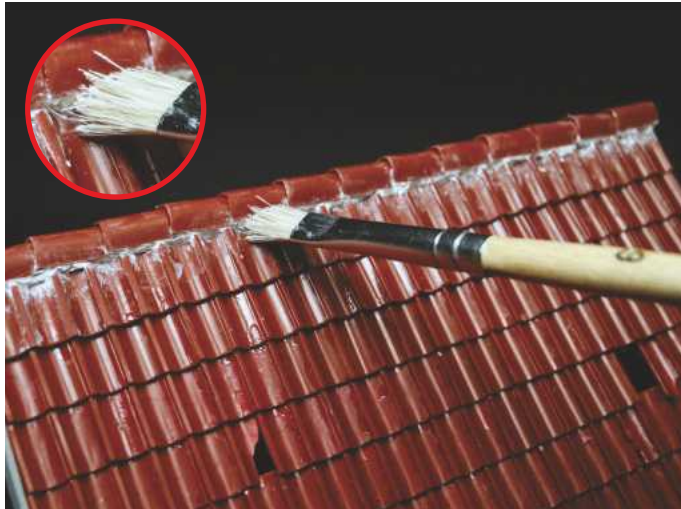
ABOVE RIGHT: Juweela tiles are always a good solution if you want to build a tiled roof.



## Diorama

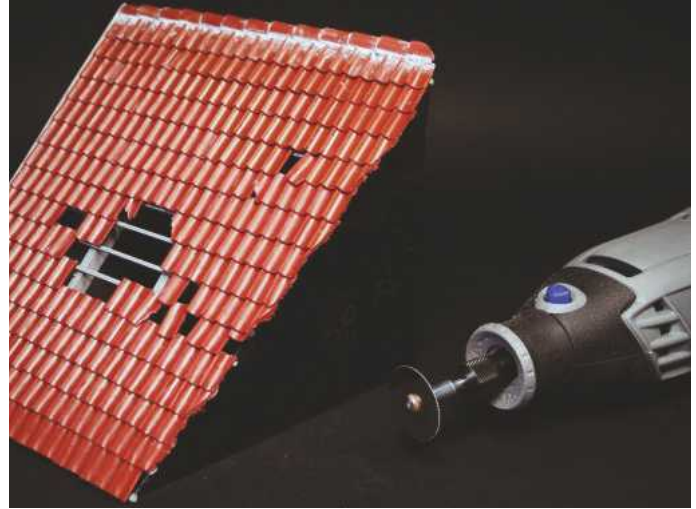


ABOVE LEFT: Several of the tiles from the damaged section to be crushed and used later on the ground in front of the house. ABOVE RIGHT: Using Perfect Plastic Putty (acrylic) from Deluxe materials for the cement of the top section of the tiles.



ABOVE LEFT: A stiff brush was used to help the putty into place under the tile line.

ABOVE RIGHT: Dremel used for cutting the edge of the tiles.



BELOW: Finished roof section.

plaster for a realistic appearance. A plaster layer allowed me to replicate some cracks and other damage in the walls. So, having masked all this, I applied diluted plaster with a spatula and, once it had set, I removed the masking. Further steps were to build up the roof construction which was again done using balsa wood.

For the roof tiles, I used the well-known and proved Juweela set. Although the tiles are generally good and glue well together, I needed to address their small flaws to make them fit perfectly one to the other. The opposite edges needed to be slightly cut on their undersides. This was tedious and laborious work especially when you have over 300 tiles to work with but the extra effort needed was worth it. I had also planned a hole in the roof tiles caused by some gunfire and wanted some scattered debris lying in front of the house on the ground. The tiles were glued into place and, once the top row had been applied, I simulated cement using an acrylic putty that was



ABOVE: Drilling holes for the locating pins of the wooden structure of the house. BELOW: Attaching the pins with tweezers (0.5 mm styrene rods).







The cement joint between the tiles and the upper row was painted with Vallejo beige mix.



Applying a glaze of moss patina to the tiles.

textured with a still brush and excess was removed using a cotton stick. The uneven edge of the roof was cut using a Dremel and later sanded with fine sandpaper. All the gaps were filled using acrylic putty. After finishing the roof, I thought I would add a small detail to its underside so, using Magic Sculp, I built a swallow's nest. Another was placed above one of the windows. One of the main features of the Fachwerk constructions are the numerous locating pins on the joints of each wooden log. To recreate them, I first drilled a number of holes with a 0.5 mm drill and then placed a pin made of plastic rod into each hole.

## Scenery

As I previously mentioned, the base was cut to form an almost square shape. The sides received a balsa wood finish that was painted with wood stain, sanded and painted again for a glossy and perfect finish. The cobblestone road was made of real small stones, one by one, which I collected during one of my stays in Italy. The road is slightly bulged in



House primed, with its roof ready and prepared for further steps.



ABOVE: Applying layers of diluted Van Dyck Braun from the Rembrandt series (Talens range).

LEFT: A look on the side of the roof section weathered with artistic oils, mostly Van Dyck Braun.



## Diorama



**ABOVE LEFT:** The stone section was painted with different shades of grey and weathered with neutral wash, my favourite media, then I added some moss glaze with lime and khaki mix of Vallejo paints.

**ABOVE RIGHT:** As it comes to using the neutral wash I always try to work with it as much as possible, I tend to start with transparent layers for general wear blending and then add more, thicker layers to the shadowed areas of construction.

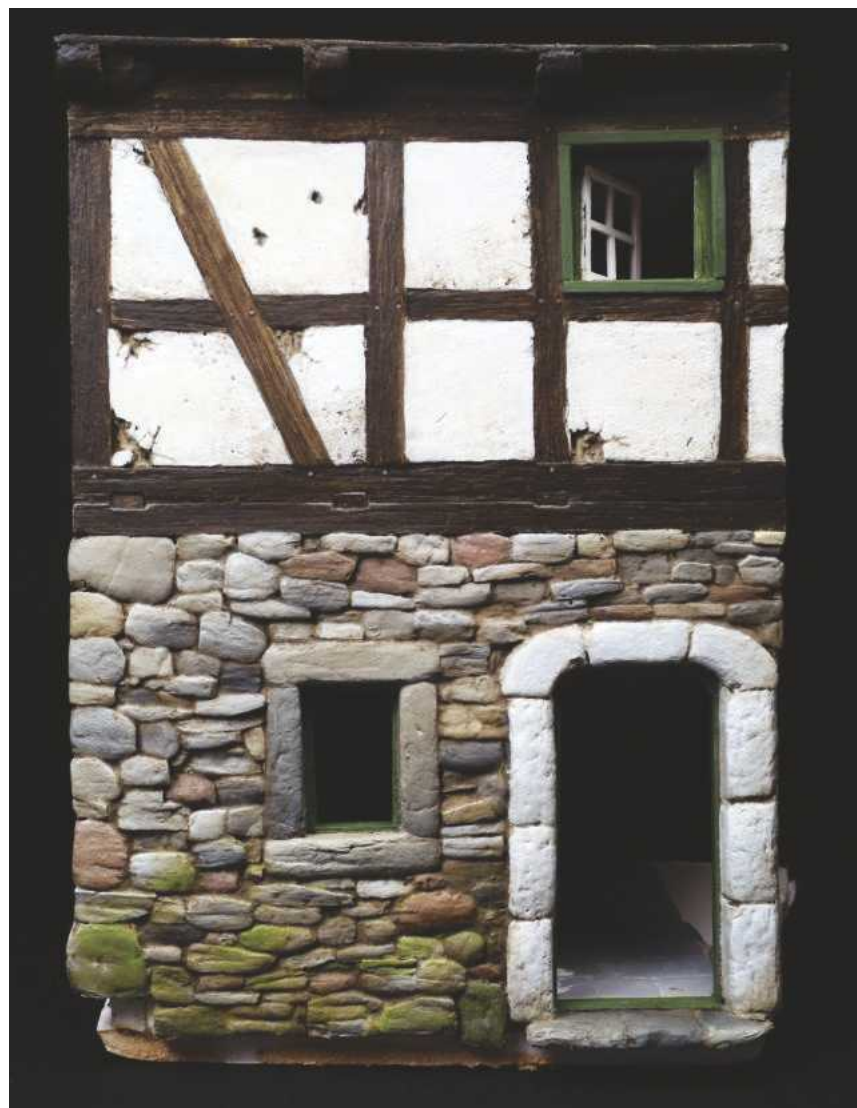
**RIGHT:** To enable air transport, I built the roof as a separate part from the rest of the diorama to make it fit into hand luggage.

**BELOW:** General look on the finished side, the windows are yet to come.



## Painting

I first applied a layer of Ammo primers to the roof section and the whole building. The back of the house was primed with flat black (as well as the roof section). The rest was painted with light grey primer. The tiles were later sprayed with a mix of Lifecolor paints (Old tile lightened with deposited dust). Later on I used Vallejo paints to paint the cement between the upper rows of tiles and further weathered the whole roof with Mig Prod. Neutral wash. That's actually one of my most used weathering products; the colour is just spot on for giving a worn and used look. I also weathered some of the tiles with a greenish glaze (Vallejo Dark Mud colors diluted with retarder). The front part of the roof section, with the planking on it made of balsa





wood, was mainly painted with a mix of grey and Van Dyck Braun (artistic oil paints that is). The same paint type was used to paint the structure of the Fachwerk construction. Initially, I painted a beige base on the wooden parts of the construction. Originally, the wooden parts were covered with a black-brown mixture to protect the wood from weather so, to replicate this feature, I used a lot of Van Dyck Braun oil paint. The process was repeated with transparent layers up to the moment when I achieved a satisfactory effect.

The stones of the ground-floor section were painted with various grey and light brown-rose tones, then weathered with transparent layers of lime green colours. This was used to add a moss effect to the lower parts of the stone-wall. Again, the neutral wash was used here to add more volume and contrasts to the stones. Once the house was done (with the window frames painted in dark green to add more colour variation to the whole thing) I thought of adding some small details to the house. The first thing that came to my mind was a house number. I used a small square piece of styrene sheet, bulged with Magic Sculp and once it had dried I painted it in blue and added a decal. This was glued to the front section of the house above the doorway. Another thing was a wooden frame for creepers and flowers. This was added to the longer wall at ground floor level. In front of the house, various agricultural items were added like a bag of potatoes or a wooden bucket. Some other bits were added to the scenery as well such as newspapers and other paper bits scattered around were added or a piece of luggage (Royal Model) left behind by the fleeing civilians.

## The figures

The figures are always a fun part for me. As with the most of my builds, I go for scratch-building instead of commercial pieces. With this scene, I ended up with nine; six Soviets and three French. I managed to balance the composition with the figures, having three of them positioned on the tank and the other four forming a separate story with the captured Frenchman. The dead ones formed a background for the story; if you take a first glance at the scene, you barely see them. I always say (and aim to achieve this at the same time,) that the interaction among figures is one of the most important things in creating a lifelike and natural scene. That's the beginning and the end of every diorama. No matter what kind of environment we build or the scenery we create, it is the figures which add life and form the core of an interesting layout. It's always good to have it in mind to align the figures with the groundwork and to take advantage of its shape for the composition or building a specific atmosphere of the scene. Another thing is the facial expressions of the figures we use, their gestures and the attitudes that their body express. Each figure should form an individual story on its own that goes together with the others to form a bigger format. With this work there are two different stories happening at the same time, with a joint link, which is the DP 28 gunner, standing towards the JS-2, so basically you notice his appearance but don't pay that much attention to the figure. He's the most neutral figure here. The soldier aiming at the French



ABOVE: One of my ideas for creating grass lumps – gluing lumps of static grass to a sheet styrene section for easier painting with an airbrush.

SS man has a determined pose, you know he won't hesitate to shoot the POW if any false moves happen. The SS officer shows signs of the effects of the situation he has found himself in and doesn't look optimistic regarding what might happen in the next few minutes. The Soviet 'smoker' closes the composition and adds a victorious touch to the scene. As for the painting of the figures, I used various Vallejo paints.

## In the end

The idea behind this diorama was to show more of the artistic intentions of the creation phase rather than regular step by step material. I always try to approach my modelling subjects from different sides, including historical background and research, artistic aspects as well as trying out new solutions. With this subject I was finally able to practice a new method of building houses, far easier and cleaner than the regular sculpting in plaster castings as I did in the past. Depron foam proved itself as a reliable material for buildings. The JS-2 model used for this scene was also one of my shelf queens waiting for its turn to be completed for years. This final battle theme seemed to be an excellent opportunity to finish the model. Although we might have the impression that in today's modelling world all has been said and done but there is always room for forging one's own way of modelling. We should remember that no progress is made without challenging our own shortcomings and realizing the errors that we make. That is why we should always have open minds for the constructive criticism that is the motor for striving towards development of our own skills. Happy modelling!



Various views of the figures.





# Gun on truck loaded automatically (DANA)



**Cristian Lupu** presents the impressive HobbyBoss 1/35 152mm ShkH DANA vz.77

## A box-full of parts

Back in 2010 when HobbyBoss released this kit with its 650+ parts it was one of a few that exceeded the 500 parts threshold. Although it has been followed by kits sporting an even higher part count it remains an impressive kit both in its complexity and size.

The box that the kit came in was a bit smaller than one would expect. After opening it you will notice that it is filled to the brim with 15 sprues and separate parts for the cab top, bottom and the platform moulded in the familiar tan styrene we come to expect from HobbyBoss as well as eight rubber tyres, three PE frets and a large decal sheet.

A great help during the building process was Tankograd's Czech Wheeled Self-Propelled 152mm Gun-Howitzer DANA book. It presents a plethora of colour images from different time periods and vehicle users with helpful interior details as well as different camouflage patterns and colours. The

images showing the vehicle in action would also provide great weathering references.

The instructions come as an A4-sized booklet which leads you through 34 steps. The steps are kept rather simple and uncluttered, the part numbering is correct and there was nothing unexpected or obviously missing.

The markings and painting sheet provides instructions for four different vehicles but without specifying closer details regarding their nationality and field period. Judging by the markings, these must be three Czech and one Georgian vehicle.

The camouflage schemes contain two in olive drab and two in three-colour camouflages. Admittedly, scheme number three on the sheet looked attractive with its light green main colour but the Georgian vehicle was more exotic despite its plain, olive drab scheme, so this was chosen to be the one depicted in this build.

*BELOW: The cabin sub-assemblies have been kept separate for easier painting.*







ABOVE: The cabin parts have been painted, assembled then weathered as a whole. The communication equipment knobs have been hand-painted based on reference images.

## Building the beast

### The cab

The first three steps will guide you through the cab building process. The busy appearance of the original with lots of brush guards and handles is reproduced very convincingly.

The cab interior is also well detailed although there won't be much to see once it is closed. The only thing to mention here is the missing FCS Topaz communication module normally seen on Czech vehicles. Fortunately, ToRo Model caters for corrections with its driver figure set (Kit. No. 35F44) which also conveniently includes an extra set of decals. For those that decide to build a Czech vehicle, this add-on is certainly something worth considering.

The colour call-outs in the instructions seem to be accurate with only the exception of the communication equipment which is labelled as Light Blue where images would show it to be grey. Speaking of communication equipment, its knobs and handles are nicely reproduced but there are no decals for it or detailed instructions for the painting, so the aforementioned Tankograd reference book came in handy at this point.

After assembling the cab parts from its major components, the interior details have been painted using Revell paints. The interior was covered with 05 White, the seats with 89 Leather Brown, the steering wheel and floor with 09 Anthracite, the stick with 39 Dark Green while the grey parts were primed with A.MIG-2002 Grey Primer.

The exposed edges have been treated with a sponge to replicate scratches from use and abuse using A.MIG-044 Chipping colour. Additionally,



ABOVE: The engine parts have been primed using Revell 09 Anthracite.

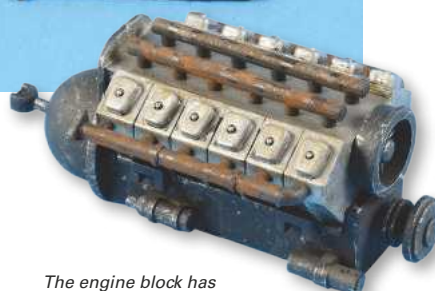
exposed corners have been lightly rubbed with a graphite pencil for an exposed metal look.

The white interior walls received a diluted wash mixed from Winsor & Newton oil paints using 80% Burnt Sienna and 20% Lamp Black mixed in a 1:5 paint thinner ratio.

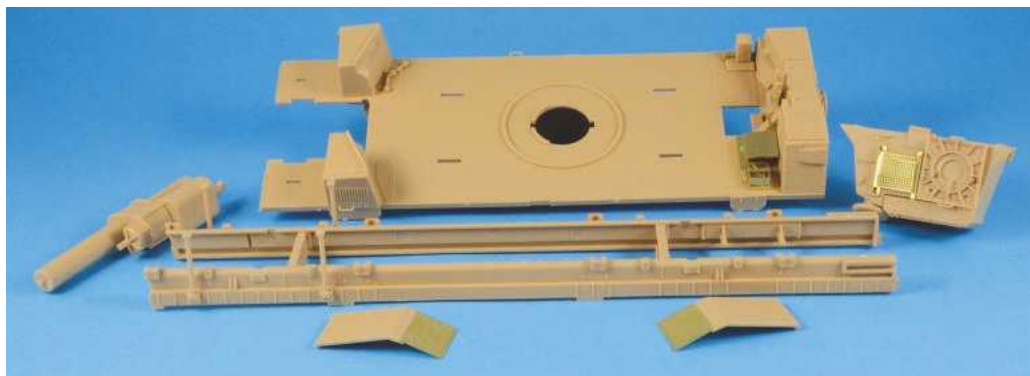
### The engine

For the next step, the frame construction shown in step four was skipped to assemble the engine. The details are very convincing but the accuracy is questionable. Although there is at least one image of the engine showing the same exhaust arrangement as the one reproduced in the kit, most other images show a different layout. More than that, once assembled on the frame, the engine sits about one centimetre too far

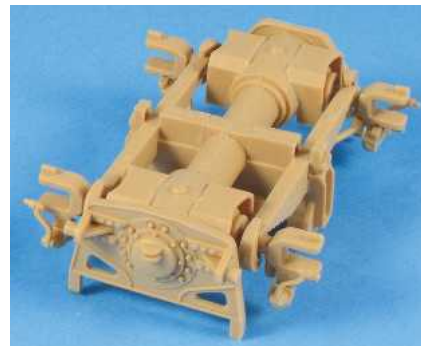
BELOW: The engine looks great even if its accuracy is questionable.



The engine block has been painted Revell 91 Steel. Details have been dry brushed with the same colour and finally a wash of Ammo of Mig Fresh Engine Oil has been applied.



ABOVE: The frame and platform sub-assemblies have been prepared for painting. PE parts are greatly improving the details.



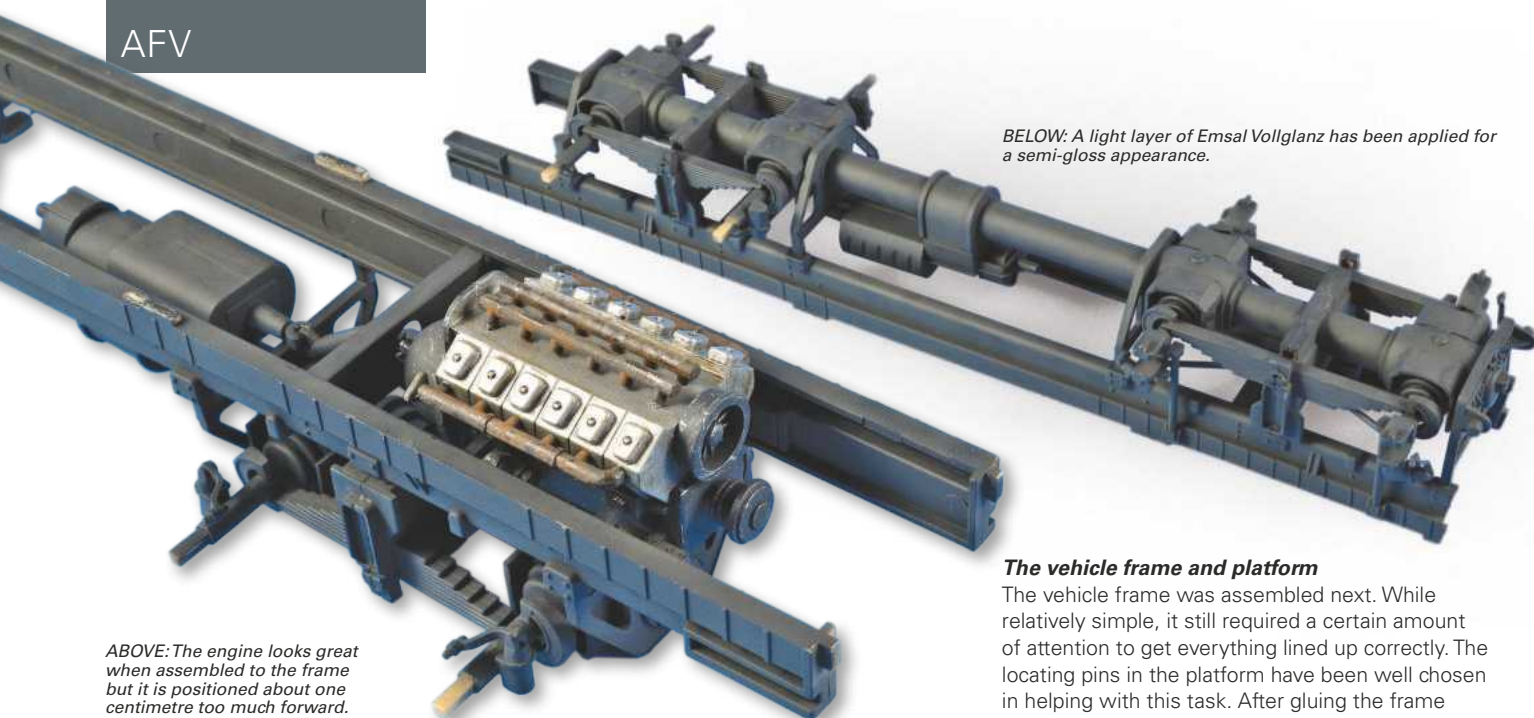
ABOVE & BELOW: The suspensions are surprisingly complex but look absolutely great.



LEFT: The frame has been painted Revell 06 Tar Black. This colour was taking light, sand coloured pigments excellently.

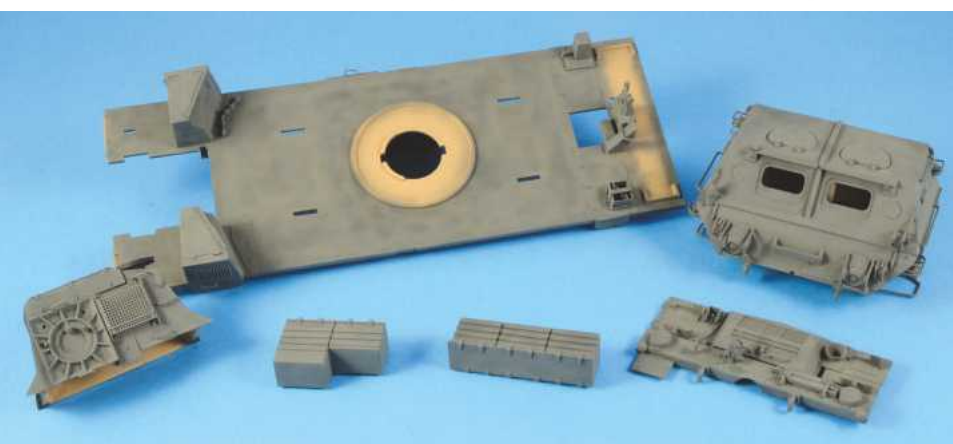






*ABOVE: The engine looks great when assembled to the frame but it is positioned about one centimetre too much forward.*

*BELOW: A light layer of Emsal Vollglanz has been applied for a semi-gloss appearance.*



*ABOVE: The cabin and platform are painted Revell 66 Olive Grey with large flat surfaces sporting a cloudy coverage for more contrast.*

forward. However, all of this can be fixed with the minimum of effort and is only of concern if the engine bay is depicted open, which was not the case with this build. Once the major components of the engine have been assembled, the parts have been primed with Revell 09 Anthracite. The piston block then received a layer of Revell 91 Steel while the same colour has been used to heavily dry-brush the remaining components. The exhaust pipes have been stippled with Revell 83 Rust. Once the paints were dry, local washes of A.MIG-1408 Fresh Engine Oil were applied to replicate the shiny, oily spots specific to this part of the vehicle.

### **The vehicle frame and platform**

The vehicle frame was assembled next. While relatively simple, it still required a certain amount of attention to get everything lined up correctly. The locating pins in the platform have been well chosen in helping with this task. After gluing the frame parts together, they were dry-fitted to the platform to avoid alignment problems later. The suspensions on the other hand are very complex with lots of parts but great fit. The only possible improvement would have been the provision of steerable wheels but, given the complexity, it would probably have complicated the assembly even more.

The vehicle platform followed with its surprisingly simplistic structure. The covers are reproduced by thin PE parts which result in a great overall look. The mud guards were also a nice touch, made with PE parts with the manufacturer logo on them. A pity these will be completely hidden on the finished vehicle.

The frame sub-assemblies received a coat of Revell 06 Tar Black followed by a light coat of Emsal Vollglanz (a replacement for the Future Floor Polish which is easier to get in Europe) to add the slight shine of a semi-gloss paint. With all parts covered in paint, these have been assembled into their final position and the engine has also been placed.

The cab and platform sub-assemblies received their coat of Revell 66 Olive Grey. Larger, flat areas have been covered evenly with a slight cloudy look to disrupt the monotone appearance. This patchy look will be toned down in the following steps by the washes applied over it, so no worries if it looks overdone at this stage.

With the paint dry, the platform and the frame have been assembled, paying special attention to the wheel alignment to make sure that they all touched the ground. The wind shield rims received a black coat from a thin permanent marker to suggest the rubber sealing around the glass. Again, this touch will be mostly hidden. After adding the cab to the vehicle, the impressive size starts to show.

### **The main gun**

Undoubtedly, the most prominent part of this vehicle is its 152mm main gun. I wish a turned metal barrel was provided with this kit. Surprisingly, not even the after-market companies have been jumping on this, so there is no replacement barrel to this day. Having said that, the barrel provided in the kit is really nice. The assembly guides are well chosen and the alignment can be handled well with a bit of attention and cleaning.

Another slight let-down is the missing detail in the crew cabins. The ammunition storage and the loading mechanism would have brought this already great kit at least one step forward. Despite the missing interior, the cabin exterior detail looks great.

*BELOW: The cab adds another five centimetres to the length of the vehicle.*





## Painting and weathering

As already mentioned, this vehicle is going to depict one used by the Georgian Ground Forces, so the paint scheme will be plain Olive Drab. Revell 66 Olive Grey was chosen for the base colour while exposed elements have been highlighted with a 50-50 mix of the base colour and Revell 16 Sandy Yellow.

The base paint has been covered with a layer of the aforementioned Future replacement, Emsal Vollglanz, to provide the glossy surface for the decals. Apart from a plethora of handle markings, the registration plates were about the only decals that needed to be applied.

This vehicle is sporting a lot of large, flat horizontal areas which makes it a great candidate for zenithal highlighting. Basically, a method which highlights areas of the vehicle that are directly exposed to sunlight increasing the contrast with the darker, shadowed areas. While there are several methods to achieve this effect, the one chosen in this case involves white oil paint. A blob of Winsor & Newton Zinc White has been squeezed from the tube and placed on cardboard which helped soak up the excess oils, reducing the paint glossiness. Next, the paint has been diluted to a fluid creamy consistency using lighter fuel. Notice that using lighter fuel instead of odourless turpentine has the added advantage of further reducing the paint glossiness.

The diluted white oil paint has been sparingly applied in a thin layer around the edges of exposed areas then spread towards the surface interior using a soft, flat brush moistened in lighter fuel. After spreading and removing most of the paint this way the remaining translucent coat will constitute a very convincing light gradient. A simple but highly effective method! After the oil paint has been left to dry for a day, it has additionally been sealed with a layer of Emsal Vollglanz to avoid it interacting with the following weathering process.

While flat, horizontal surfaces catch the sunlight very well, they do the same with grease and grime. Accumulations of such can be easily reproduced by oil paints due to their high pigment concentration. The slow drying time is another plus allowing for corrections even minutes after application.

The grimy, dirty colours can be replicated by paints in different black and brown shades. In this particular case, a 70-30 mix of Winsor & Newton Burnt Sienna and Lamp Black has been used.

In the first step, the mix has been diluted in a 1:3 ratio with lighter fuel and applied as pin wash around the nooks and crevices all over the vehicle. This gives a good base for the dirt accumulations while accentuating the details on an otherwise plain green surface.

After allowing the washes to dry overnight, the same oil paint mix has been used, this time only diluted to 1:1 which results in a thicker mix that is placed around closed corners, raising details where dirt normally accumulates. After letting the mix dry on the surface for a few minutes, it has been pushed around toward the corners so that the pigments would stack up there, forming the characteristic dark sediments. Sparingly touching up



*LEFT: The window rims are painted black using a marker to replicate the rubber sealing.*

*BELOW: The vehicle base is ready. Almost 30 centimetres end-to-end!*



*ABOVE: The main gun is certainly the central eye-catcher. Although a turned metal barrel would have been better looking, the styrene part looks majestic too.*

*BELOW: Missing interior details to the fighting compartment are a downside but these still look good with all hatches closed.*



*The turret is a real monster!*







ABOVE: The side mirrors have been replicated using silvery insulation foil.



ABOVE: A watery mix of Vallejo pigments have been applied to the wheels and lower vehicle frame.



ABOVE: The excess pigments have been removed after drying with a soft brush and cotton buds.

ABOVE: Revell 66 Olive Grey has covered the main body and gun with Emsal Vollglanz providing the glossy surface for the decals and weathering.

the accumulations with A.MIG-1408 Fresh Engine Oil adds some oily glossiness to these areas. It is worth mentioning that moistening the whole surface with thinner before applying the paint will avoid the forming of edges when the thinner evaporates, reducing the retouching effort.

Reference images were usually showing rather clean vehicles without too much mud accumulation so the following step of adding dirt and mud was kept at a minimum concentrated on the wheels and the lower chassis.

Mud accumulation has been replicated by several pigment layers applied on top of each other going from light to dark and reducing the amount with each layer.

The first pigment layer was applied with Vallejo 73103 Dark Yellow Ochre diluted in a 50-50 mix of tap water and isopropyl alcohol (IPA). The mix has been applied with a large, soft, round brush to the tyres and the lower chassis. Due to the mix in IPA, the pigments were dry within a few minutes.



ABOVE: Raised details have been picked out with a lightened shade of the base colour mixed with Revell 16 Sandy Yellow.

The next layers were applied with the same method but reducing their quantity to half of the previous one. The pigments in use were Vallejo 73105 Natural Sienna and A-MIG-3007 Dark Earth.

Once the pigments were fully dry, most of them have been removed from the flat surfaces with a large soft brush and cotton buds only leaving accumulations around raised areas.

## Conclusion

I have very few complaints to make about this kit. The engineering of the kit was just about right and it provided a lot of modelling fun with the right balance of challenges and a satisfying fit. A metal barrel and fighting compartment details were about the only thing that could be improved.

There were great camouflage patterns for airbrush fans but also one-colour schemes for minimalists, giving the perfect balance for all kinds of modellers, experts or beginners.

Due to its somewhat bizarre but interesting background as well as its impressive look, it will surely draw attention from fellow modellers be it on your shelf or exhibition table.



ABOVE: The engine deck grime and dirt accumulations have been replicated with brown and black oil paints.

BELOW: The layers of different coloured pigments applied on top of each other resulted in a very convincing final result.











# Nine Hats

Ray Westlake reminisces on a 'military' purchase



## 'Cigarette Cards – Some Military'

I'm unable to remember now whose market stall it was. The knowledge of the price paid, along with the Ryman's-bought notebook in which such important transactions were once meticulously kept in the 1960s and 70s has disappeared too. There was 'The Arches' in London's Villiers Street, that Nicholas Barbon-built thoroughfare of the 1670s that takes passengers from Charing Cross Underground Station on up to the shops in the Strand and where Rudyard Kipling once lived at No.43, where market traders set up their Saturday stalls below the overhead thunder of the railway and the less fortunate of them positioned by the street entrance to the place froze to death; their hands sticking to brass, bronze and white metal during the winter months. But happy were they in the summer, dark, dingy and smelling of horse, the inside depths of the once railway stables were always cold.

There was Portobello Market on the other hand, where everything was tourist-priced or perhaps south of the river on a Friday morning at Bermondsey. The Caledonian Market, where money changed hands as early as 4am, visitors to London got lost in the dark and bargains were few. Although I was once fortunate enough to find a Liverpool Pals cap badge priced at five shillings. As a brass issue, a bargain even then, but better still when after cleaning, it turned out to be silver.

There was plenty to appeal to the Militaria collector at Camden Passage, not in Camden at all, but in neighbouring Islington, which could be reached via the Angel Station and the rigors of the Northern Line. Bargains, perhaps in the Wednesday and Saturday-set up stalls, but not in the many permanent shops. Fond memories here of Sir John Betjeman as, in 1965, he unveiled a plaque to writer Alexander Cruden who lived at No.45 Camden Passage.

But perhaps the purchase of, 'CIGARETTE CARDS – A MIXED LOT - SOME MILITARY' (this is the description written in a schoolboy hand on a foolscap envelope) was not at a London market at all but from a Militaria fair. If so, well it could only be the once-or-twice (I think), yearly 'Bedford'. Established long before such events became weekly, we saved up our cash, talked of it for weeks to come ('I'll bring that badge along to Bedford'), and on the day stood patiently in line (chatting,



swapping, buying and selling) awaiting opening time at the Corn Exchange, the queue stretching all around the corner for what seemed like miles. Fond memories again as I visualised the BBC Symphony Orchestra, Glen Miller, Bing Crosby, Vera Lynn and Bob Hope as they entertained Bedford's wartime population at the same venue.

## A 'Mixed Lot'

But what about those cards. A 'MIXED LOT' indeed; for here were footballers, film stars, speedway riders, kings, queens and freshwater fish, all from John Player & Sons; flowers, old inns, more footballers and royalty from W D & H O Wills; crowns for their heads from Godfrey Phillips Ltd and from Ogdens, a selection of notable dogs, British birds and, of course, the ever popular footballers. 'SOME MILITARY'? Well 'SOME' indeed. For out of a total of 400 cards, just nine from the collection would fall into the category of 'MILITARY', all of them examples from the 1931 John Player & Sons 50-card set, *Military Head-dress*. But few in number as they were, my 'nine hats', nonetheless, would justify my outlay (whatever it was). Interesting then, interesting, I hope, still.

Beautifully drawn and painted, in card No.29 (Fig.1) we see the other ranks' woven worsted forage cap of around 1852. Quite plain, and dark green in this case as we are looking at a light infantry regiment. The cap has a tuft at its top, the bugle-horn badge and the numerals of the 43rd (Monmouthshire Light Infantry) Regiment. Formed by Colonel Thomas Fowkes in 1741, the regiment



5



was ranked as 43rd in 1751, receiving its territorial designation in 1782. But, be Monmouthshire in England or Wales, the title would be left behind when, in 1881, the regiment became 1st Battalion Oxfordshire Light Infantry (Buckinghamshire not to come into things until 1908). Forming the 2nd Battalion of the same regiment was the 52nd (Oxfordshire Light Infantry) and there is a photograph of a group of buglers dated 1862 which shows the same cap with bugle badge and, of course, the relevant numerals (**Fig.2**).

Card No.50 (**Fig.3**) fits quite nicely alongside a photograph taken of the 6th Battalion Royal Scots at Edinburgh in 1909 (**Fig.4**). Here, just months after transfer to the Territorial Force and comprising total abstainers, since 16 Company of the 1st Edinburgh Rifle Volunteers was formed in 1860 by temperance leader John Hope, most are seen wearing the Kilmarnock Bonnet introduced in 1904.

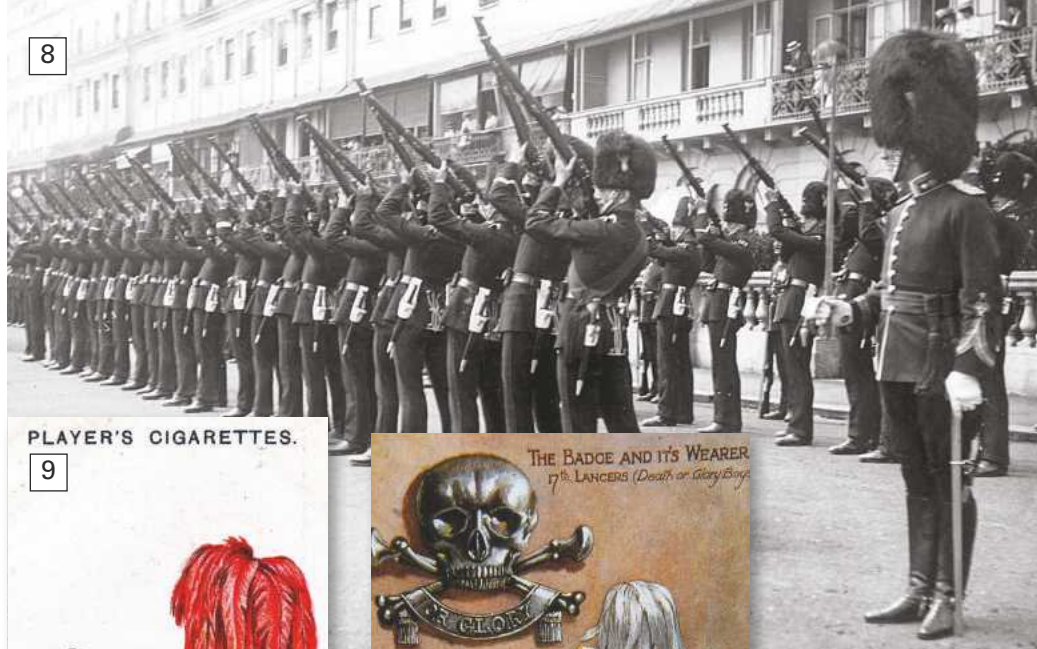
Almost a perfect match (save for the 1881 change in badge) is the 71st Regiment's company officers' shako (**Fig.5**); note the absence of gold lace around the top and the Edgar A Holloway post card taken from Gale & Polden's c1914 'Ceremonial and Active Service' series (**Fig.6**) in which we see two mounted officers passing a private. Two rows of lace for the colonel, one for the major. The 71st, a 'Highland' regiment since formation in 1777, styled as 'Light Infantry' since 1809, became 1st Battalion Highland Light Infantry in 1881. Nicely painted in the cigarette card are the features of the 71st shako: green ball tuft, green-red-white diced border, black lines and pre 1881 bugle-horn badge displaying the regimental number.

6





8



PLAYER'S CIGARETTES.

7



5TH REGIMENT OF FOOT;  
Officer's full dress fur cap, 1874.

PLAYER'S CIGARETTES.

9



12TH LANCERS;  
Officer's full dress cap, 1859-81.



10

PLAYER'S CIGARETTES.

13



4TH REGIMENT OF FOOT;  
Officer's forage cap, 1852-1881.

PLAYER'S CIGARETTES.

11



11TH HUSSARS;  
Officer's forage cap, 1860.

12



In **Fig.7** we see a fine image of the bearskin cap as worn by officers of fusilier regiments. The 5th Northumberland Fusiliers in this case easily recognisable by the red-over-white plume in use since 1829. The silver and gilt grenade badge, a basic shape common to all fusilier regiments, has on the ball the figure of St George slaying the dragon, an ancient distinction of the regiment going back at least as far as 1797 when it first appeared on the Colours.

A glance at an 1874 *Army List* will show the 1st Battalion as stationed in India, the 2nd nearer to home in the Channel Islands. On to 1908 and Dover where we see in **Fig.8** a party from the regiment, the shorter racoon-skin cap for the men, an officer nearest the camera, firing a salute on the occasion of the King's Birthday Parade.

Fond memories now of that wonderful shop, Blunderbuss Antiques, which was opened at London's 29 Thayer Street in 1968; the place was more like a well-stocked museum than a shop. There were enough swords to equip a cavalry regiment, flintlock pistols and Brown Bess muskets sufficient to deal with Napoleon all over again. Plentiful too were the uniforms that hung in neat rows by the yard, and the shako, helmet and other once-in-a-lifetime-seen badges that filled glass-fronted showcases to overflowing. But of great attraction were the headdress

items that, perched high up on shelves around the walls, plumes caressing the ceiling, feathers drooping down, chin-straps, metal fittings and embellishments glinting in the Marylebone sun, formed the personal (not for sale) collection of proprietor Tom Greenaway. Headdress such as that seen in **Fig.9** (12th Lancers). Typical of lancer regiments at the time, the '1859-81' officers' full dress cap shown has been drawn and painted to perfection. To compare, not a photograph this time but the work of another superb military artist, Harry Payne (1858-1927). His study of an officer of the 17th Lancers (**Fig.10**) taken from one of the Oilette 'The Badge and its Wearer' series qualifying, perhaps, for a fine cigarette advertisement.

In **Fig.11**, a c1860 officers' forage cap to the 11th Hussars, we see yet another example of the artist's attention to detail. The regimental pattern gold lace finely depicted, true in every detail, and looking almost three dimensional on the card. The 'Pill-box' cap. No Victorian-set film being complete without at least one soldier walking along the street, swagger stick under one arm, a girl on the other, wearing this, I imagine, quite comfortable headdress. Here in crimson cloth for the 11th, while the 15th Hussars had scarlet, the rest with blue. Taken sometime in the 1860s, the photograph in (**Fig.12**) shows the same cap being worn by an officer of the 4th (Queen's Own) Hussars.

Just as comfortable after the weight and size of a full dress shako or helmet would have been the forage cap shown in **Fig.13**. An infantry and peaked type this time, the example here being that worn





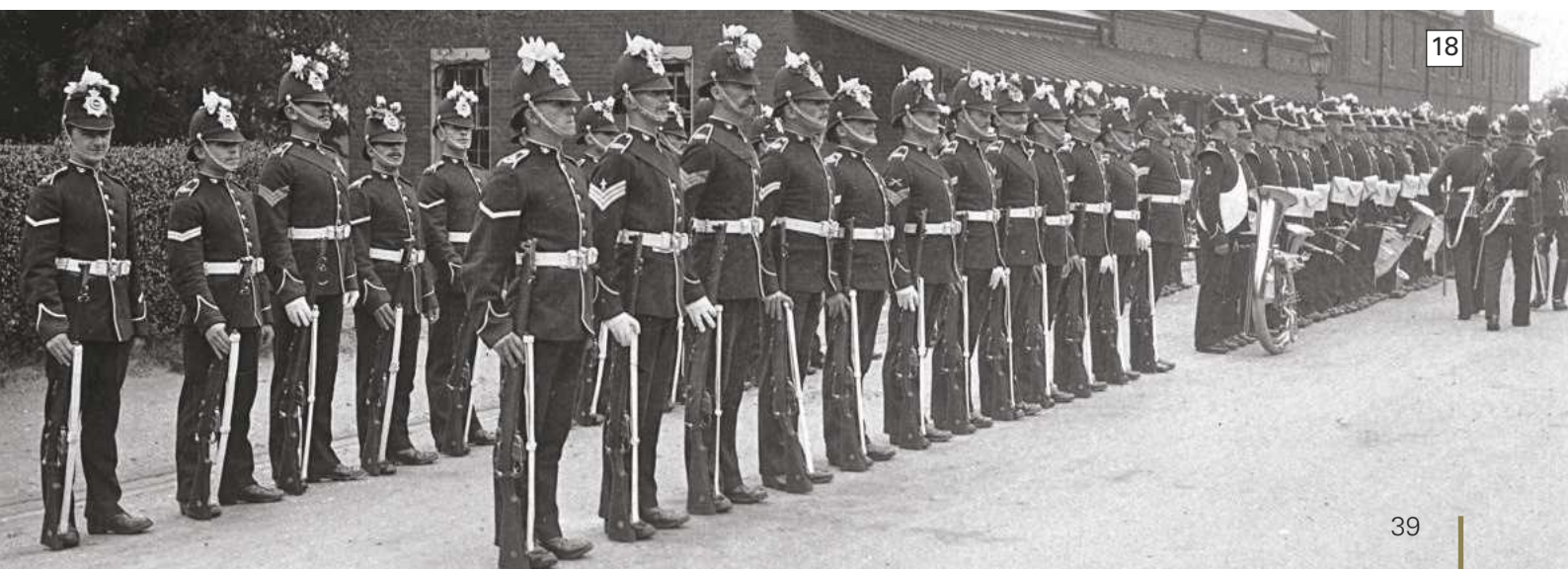
by an officer of the 4th (The King's Own) Regiment of Foot, later to become the King's Own (Royal Lancaster Regiment) in 1881. This, my records tell me, is the pattern introduced in 1852, smaller than the previous one and having a straight peak. There would, naturally, have been an unofficial name for the cap; the 'Cheese Cutter'. As a 'Royal' regiment, a scarlet band. The Lion of England, an ancient badge of the regiment, having been given by William III as a reward for services after his landing in England. To compare, an officer of the 9th (East Norfolk) Regiment, the badge being the figure of Britannia this time (**Fig.14**).

It is said that Prince Albert had made some contribution to the design of the new infantry cap introduced at the end of 1843. The 'Albert' shako, as it became known, first appears in *Dress Regulations* for 1846 and is described as: Black beaver, 6¾ inches in depth, narrowing in diameter by ¼ inch at the top than at the base. Patent leather forms the top and the peak, the latter just under 2½ inches deep at the front, 1¼ inches at the back. Generally, eight-pointed, crowned, star badges were worn by officers, but as we can see from our John

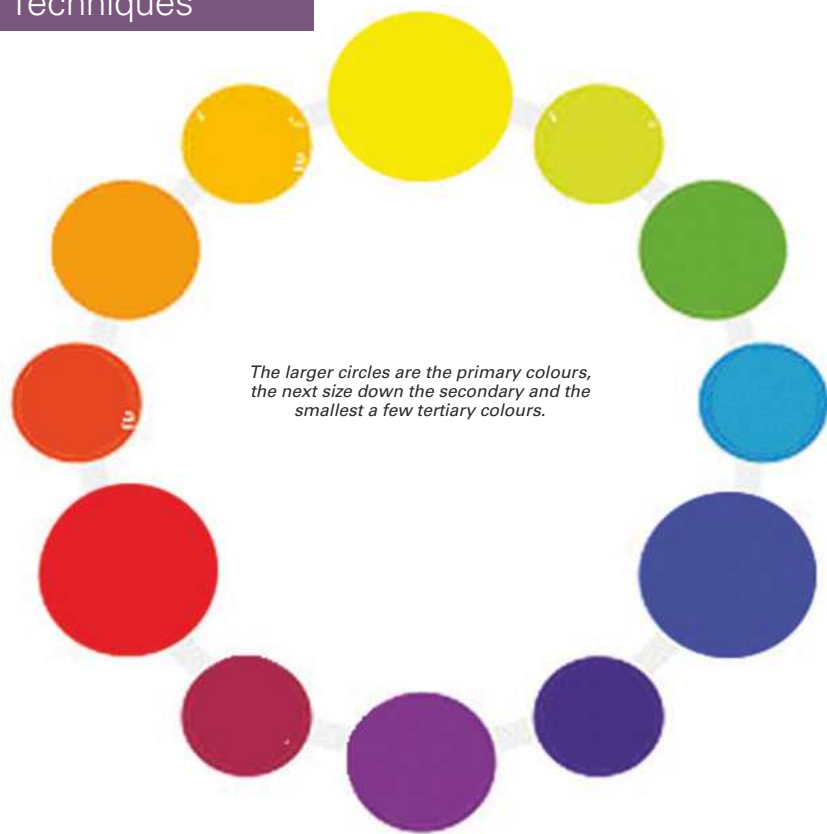


Player's card that for fusilier regiments took the form of a tall grenade device bearing the regimental distinction on the ball. Here in **Fig.15** we have the Albert Shako for the 21st Regiment, also known as the 'Royal North British Fusiliers' from 1751, then the more familiar 'Royal Scots Fusiliers' after 1877; the number being dropped as part of the 1881 reforms. The white worsted tuft above the grenade would have identified the wearer as a member of a grenadier company. In the accompanying colour plate (no photographs at this time) we see the same headdress, this time being worn by two members of the 12th Regiment (**Fig.16**). Note the officer's star plate and his battalion company white-over-red tuft.

We end with a nice illustration of the Home Service helmet. Introduced in 1879, the original numbered plate having a currency of just two years. Here in **Fig.17** we see the '17' and Royal Tiger super scribed 'Hindoostan' of what would become the Leicestershire Regiment in 1881. In **Fig.18**, here again is the helmet; but we have moved on a handful of years and numbers have gone. But there are flowers? Well this is the King's Own (Yorkshire Light Infantry) celebrating Minden Day after all. **MM**







**Peter Gillson** sets himself a challenge with only the primary colours plus white and black

## Primary Colour Challenge

**L**ike most modellers, I have a tendency to not only collect kits which remain unmade but also numerous tools, gadgets and paints - especially paints. We are in a golden age of modelling when it comes to paints, oils, enamel or acrylic and so many manufacturers, each with their own range or ranges. The availability of colours is fantastic, but is it too large?

A little while ago, I found two figures in my stash of unmade kits and decided to complete them, but do so by setting myself the challenge of using only the three primary colours, or to be more precise, my palette was limited to one shade of each of the primary colours plus white and black.

When I started, I had no idea how they would turn out potentially, a disaster. All I was sure of was that it would be a challenge and that my colour mixing ability and knew it would be tested to the limit, and it was.

### Colour theory

The technical bit; colour theory. The colour wheel and understanding it is a really good place to start. Created by Sir Isaac Newton, it suggests a logical structure to colours, showing the harmony between colours. Those on the blue side are termed cold while those on the yellow side are termed warm colours.

To start by stating the obvious, the primary colours are red, blue and yellow. Mixing equal amounts of any two of these will produce the secondary colours while adding an equal amount of one of the primary colours to a secondary will



The King David figure. NOTE: Saved from the Historex website.

produce a tertiary colour, as shown in my simplified version of the colour wheel.

Where colour theory gets interesting is when we start to consider complementary colours, which are the colours directly opposite each other on the colour wheel, for instance, green is the complementary colour for red.

The most obvious use of complementary colours is to mix more colours, the main theoretical mixes are:

Yellow + Violet / Purple = Warm Grey  
Blue + Orange = Cool Brown  
Red + Green = Warm Brown

Because one complementary colour will be warm and the other is cold they tend to neutralise each other rather than harmonise which can be used to subtly affect another colour. Adding a little of the complementary colour can darken the original colour, for instance, a little green to red will create a richer shade than would be obtained by adding black.

This brings me nicely onto black. I included black in my palette of colours as a fall-back, intending to mix my own shade of black. It takes all three primary colours to mix black, or rather a very dark colour which is very close to black, but it will be richer, not such a 'dead' colour as black.

So that is the theory, all colours can be created from the three primary colours. Well, not quite. Unfortunately there are many shades of primary colours, some actually containing a 'hidden' colour which will affect the way that the colours mix. It is not unusual for yellows to contain a little green and this only becomes noticeable when mixing colours, as the mixed colour may take on a greenish hue, which happened to me. This is why I described the complementary colour mixes as 'theoretical'.

Enough theory, here is what happened in a self-imposed challenge.

### The Colours

The five paints I chose were all Vallejo acrylics; White, Deep Yellow, Intense Blue, Vermillion Red and Black.

My home made 'stay-wet' palette is made from a plastic food container, the type that fresh herbs are sold in. A layer of kitchen paper is placed in



The Lancer figure NOTE: Saved from the Historex website.





ABOVE: Both figures primed and ready for painting.



ABOVE: My chosen three primary colours, along with black and white.



ABOVE: The first stage of the faces completed – a little pallid at this stage.

the bottom, soaked with water and then a piece of baking parchment placed over the top. Since these are free, I often have more than one pallet on the go at any time depending on the project(s) I am working on.

## The Figures

I chose two figures from my collection of unmade figures, both produced by Art Girona; 'David, King of Israel' and 'Lancer 17<sup>th</sup> Lancers Balaclava 1854'. Choosing two completely different figures may seem like madness, but I worked on the basis that the variety of colours increased the chances of at least one being reasonable.

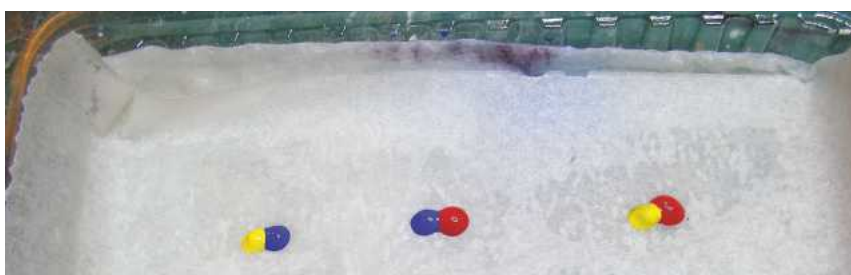
To ease painting, both arms of King David were left off as was the Lancer's left arm, otherwise they were assembled and primed using Halford's white primer.

## Flesh tone

My method of painting did not change for this challenge; I started with the skin tones and worked outwards. Flesh is a shade of pink/brown so I started mixing yellow and red to produce an orange, adding some white created a sandy flesh colour which formed the base coat. This was lightened with a little more white to create the highlights.

Creating a darker shade called for a brown – blue and yellow created a green and adding a little red made a brownish tone which I used to colour the hair as well as adding it to my base flesh tone to create a shadow tone. At this stage the colour was left a little on the pale side since I knew I would be mixing more shades of brown later on.

It took a few attempts to achieve a brown that I was happy with.



ABOVE: The Primary colours paired together in my home made stay-wet palette. Made from the containers herbs are sold in.



ABOVE: The resultant secondary colours.



## Shades of grey

One colour common to both figures is grey; for the armour of King David and the entire Lancer's uniform. Since grey is the main colour on the Lancer while being only King David's armour, I decided to paint King David first and hoped that what I learned would help with the more dominant grey of the Lancer.

Wanting to keep the flesh mix, I made a second 'stay-wet' palette. Blue and red created a deep purple,

ABOVE: My pallet when painting the skin tone. I tried a logical layout of the primary colours at the top. The bottom left is the tertiary brown, while the bottom right is the basic tone made from orange with white added.





ABOVE: David with armour and skirt painted. ABOVE CENTRE: The palette while painting David's brown skirt – an organized mess! ABOVE RIGHT: Views of the partially finished David with the inside of the shield – the inside of the shield has no details cast on it.



ABOVE: Grey achieved by mixing red and blue and then adding white.



ABOVE: The grey uniform more or less completed. Further refinement of the shading was added as painting progressed. BELOW: Partially completed Lancer- the bag was a similar colour mix to the flesh colour.



I added to this a little more blue to darken it, then a little white so that a dark grey was created. A blob of this was put aside on the palette while white was added, lightening the main pool of grey.

The mix which was painted over the armour was slightly thinner than usual so that it ran off the highest details creating natural shading in the recesses and natural highlights where the white primer showed through. When this was dry, I added a number of more watery washes of various shades of grey, gradually getting darker and darker. Each time the figure was painted upside down so paint running down would effectively be running up the figure into the areas where the shadows would be.

The brown skirt of King David was difficult. The base couple was quite similar to the skin tone and was a nice highlight colour. Darkening it proved to be difficult; as I added colours; the result was that the brown lost its 'crispness' – not easy to describe in words but the colour became more 'muddy'. The result is ok but I am not overly happy with it. Because I was not happy with it I think I overworked the painting, making it worse!

There is a 'randomness' about mixing the colours. Mixing different proportions results in different shades; shades appear and then after a little more mixing they disappear. I quickly realised that the chances of mixing the same colour for a second time was pretty small so I used it while I had it. During the process of mixing the brown, shades appeared and I used some to add shadows to the faces, then the leftover brown was used to paint the ground work of both figures.

On the bright side, the blue sash was straightforward!

## The Lancer

As for King David, red, blue and white created the grey. By not using black, the grey is richer with a slight bluish hint. The key here is to mix a lot of the base colour. Some was put aside on the palette while white was added to make a lighter shade; this was done a few times until I had a palette of a few shades of grey.

With a variety of shades of grey mixed, I painted the Lancer using my normal method – a couple of thin coats of the base of a mid-tone grey colour. Let it dry and then apply progressively lighter shades to smaller and smaller areas to create the highlights then do the same with progressively darker shades to form the shadow areas. The jacket was kept a little darker than the trousers.

## King David

Back to King David, this time the easy red – a base of the pure red with highlights of an orange made by adding yellow. The shadow colour was created by mixing a green and then adding the green (not very much), to the red.

The next part I am really pleased with; the inside of the shield. After the problems with his skirt, I approached this with real caution and trepidation. The basic brown mix was the same as the skirt but the results were a whole lot better. The casting of the inside of the shield is perfectly smooth, there is no wood grain detail and all of the grain effect is painted. If I may say so myself, I am quite pleased with it.

As with the skirt, many shades of brown were mixed and, as an appropriate shade appeared, it would be used to enhance the face or the hair, or even some of the deeper shadows in the blue. Left over brown was added to the groundwork.

Back to the Lancer; his shoes, hat and ammo pouch – the same method as the grey, only darker. Some of the grey was added to the white for shadows. The yellow and red belt was painted in pure colours while the bag was a sandy brown, like the flesh colour; red plus yellow plus white. Some of this added to the ground work for its highlights.

## The scabbard

This is where I decided to cheat. I tried mixing various shades of grey to paint the scabbard and blade of the lance, all to no avail. Every time they





ABOVE: Both partly painted figures. INSET: A not very successful attempt to paint the scabbard using grey. Using metallic paint was a lot easier!

just looked grey and completely non-metallic so I used some acrylic steel. Perhaps if I had some gloss varnish then shades of grey would have worked, but I don't have any so I cheated, using a sixth colour. With the lance and pennants painted this figure was completed.

On the final stages of King David, the arms were the parts that I was least looking forward to painting. A new flesh tint was mixed and used for the arms and legs. Various shades of flesh and brown were mixed, some were used, some were ignored, some were used for the boots! I think the yellow I had chosen has some green 'hidden' in it because some of the mixes took on a decidedly greenish tinge; perfect for a fantasy figure but not for a historical one.

The arm and shield were fixed in place, as was the shoulder armour and with a little more touching up, the paint on the sword was removed to show the base metal and the figure was finished.

## Final Thoughts

There is no doubt that this was a challenge and there was some frustration when a mix didn't work but on the whole surprisingly enjoyable. The whole process pushed my paint mixing skills to the limit but did make me think more about tone and colour than I would have had I just reached off the shelf for a colour. I think it has improved my painting skills.

The key to mixing colours with such a limited palette is to keep trying different combinations and to accept that some will work while others will not. I am pleased that I was able to avoid using black although having to admit defeat on the scabbard is a little frustrating. In the end, I think the two figures are not bad, surprisingly the Lancer is one of my top ten figures; he turned out much better than I expected.

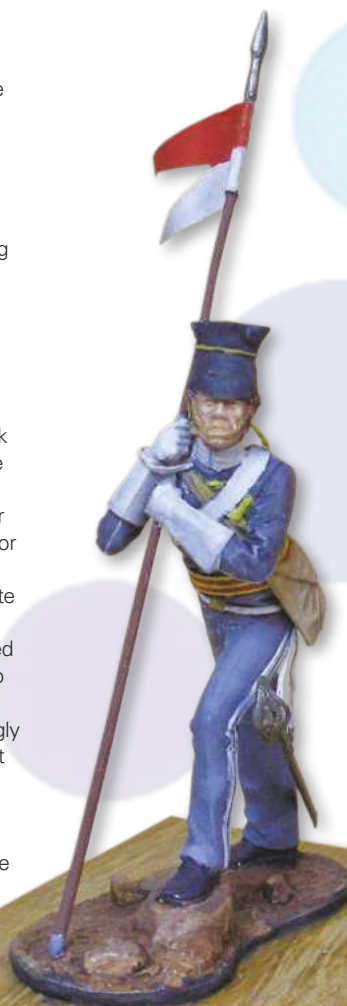
I recommend this challenge; this exercise has improved my painting. I used a couple of figures which had been languishing in my stash of unmade figures. I had no plans to use these so had it all

gone horribly wrong there would have been no great loss. Most of us will have such figures in our stashes and this is a great reason to get them out and painted. The one change I would suggest is possibly having two shades of each of the primary colours, different shades of primary colour will have a big effect on the colours you can mix.



ABOVE: A new flesh tint was mixed and used for the arms and legs.

BELOW: David's arm, mid-way through painting.



Both figure completed.







# The Dodge WC60 Emergency Repair Chassis

The first in a series of military vehicle 'walk-arounds' by **John Norris**



*TOP: The WC60 with canvas cover extended.*

*ABOVE RIGHT: Showing the full spread of the canvas cover to shelter the mechanics.*

*RIGHT: Side lockers for spare parts such as spark plugs and filters.*

In 1910, the brothers Horace Elgin and John Francis Dodge decided to establish a motor manufacturing company which was to eventually trade under the family name. Several years later, the brothers began an association with the military when their company began to supply vehicles to

the US Army from 1917. Just over 20 years later, the company of Dodge would prove itself again as one of the most successful vehicle manufacturers by supplying a comprehensive range of trucks to the US Army during the Second World War.







ABOVE: The spacious rear cargo area of the WC60 for personal kit and equipment.

It was the number of diverse designs, many of which were highly specialised, which set Dodge vehicles apart from other manufacturers. Between 1941 and the end of the war, the company produced around 260,000 vehicles which were used by American armed forces in all theatres of operations. Perhaps the most famous of the company's range were those vehicles designated 'WC'. The Dodge company applied these identifying letter codes to their vehicles, with 'W' standing for the year 1941, or later date and the letter 'C' indicating the half-ton rating. The range included ambulances and utility vehicles and was numbered from WC1 through to WC64, which were divided into various series such as the G-502 and G-505. In fact, the company produced almost 78,000 of the G-505 trucks in the half-ton range which had 38 different models.

The G-502 series included the WC51 and WC52 designs known as 'Weapons Carrier'. These two vehicles were identical, except for the fact that

the WC52 was fitted with a Braden MU2 winch mounted on the front. Dodge built some 123,541 WC51 and over 59,000 WC52 vehicles and more than 5,000 WC55 vehicles which were fitted to mount the M3A1 37mm calibre anti-tank gun. One of the lesser-known designs in the G-502 series was the WC60, which had a production run of only 296 vehicles. It was never armed, not even with a .30 calibre machine gun for self-defence. In fact, the only weapons carried on the vehicle were those personal weapons issued to the crew, for which a rifle rack was provided in the driver's position.

The WC60 was one of the designs produced in 1942 and was known as the 'Emergency Repair Chassis', which was built in the three-quarter ton range and was a 4x4 vehicle like all the others. It used the same body as the more common WC54 ambulance but was fitted with a range of tool trunks that were accessible from the outside. This configuration meant that the WC60 was essentially a mobile workshop which allowed mechanics to complete service maintenance on other vehicles in the field, including trucks and Jeeps, without the need for them to return to a support base. In other



TOP: Driver's side lockers open to show more equipment for in-field service and maintenance.

ABOVE: The WC60 was a robust and reliable design as with all Dodge vehicles.

BELOW: Side locker showing how the door folds down to become a work surface for the mechanics.





*The WC60 showing its compact design.*



*ABOVE: Spade and pick-axe for use in an emergency.*



*RIGHT: Driver's position showing basic controls for ease of operation.*

words, they were taking the service to where it was needed and in doing so reducing the amount of time a vehicle was out of service for.

The WC60 measured 15ft 6in overall in length, with a wheelbase of 10ft 1in. It was 7ft 5in in height and 6ft 10in in width. The vehicle weighed

*RIGHT: Manufacturer's identification plate fitted to door of locker.*



2.65 tons and could carry a payload of up to three-quarters of a ton. As one of the G-502 series, which included twelve separate models, its companion designs in the range included the WC54, WC56, WC57 and WC64. This range of vehicles used a remarkable 80% interchangeable components. This commonality in parts reduced the number of spares which had to be carried because what fitted one vehicle would fit the rest.

Despite being equipped to operate in a specialist role for vehicle maintenance, the WC60 was not fitted with a winch, and nor was its closest version, the WC61. Each of these vehicle types had a gearbox with four forward gears and one reverse gear through a single speed transfer case. The tyres



*View of driver's side showing how the vehicle carried everything that the crew might need.*



were 9.00X16 which was suitable for most terrains, except for the very worst conditions and the vehicle had a ground clearance of 10.5in. Suspension consisted of live beam axles on semi-elliptic leaf springs which were adequate for most conditions in which the vehicles would be operated. The WC60 was powered by a liquid-cooled, petrol Dodge 230.3cid, six-cylinder T214 engine with 76hp at 3,200 RPM rating. This developed 180 foot-pounds torques at 1,200 RPM which provided road speeds up to 54mph. With a full tank of 30 gallons of fuel, the WC60 had an operational range of 240 miles on the roads which was sufficient for most duties.

The WC60 was operated by a crew of at least two men, who were trained mechanics. A comprehensive range of tools and basic spare parts such as fuel pumps, carburettors and spark plugs were carried on the vehicle. Whilst not wide, it was believed that this range of spares and the tools that were also carried would allow the crew to complete most repairs to many other vehicles in the field without the need for garages. If necessary, the mechanics could always resort to stripping spare parts from other Dodge vehicles which were otherwise not serviceable and use these parts to complete repairs.


The tool cabinets and side lockers fitted to the rear compartment were supplied by another company and Dodge mounted them on the vehicles during assembly in the factory. The front panels of the side lockers folded down and locked into place to serve as a work surface for the mechanics. In addition to maintenance tools, the vehicle also carried spades and pick-axes for emergency use. A spacious rear area allowed more spare parts to be carried as well as personal equipment for the mechanics. This space could be used in an emergency to carry other mechanics or the crews of vehicles. Whilst it may not have been comfortable, it was perfect for providing lifts.

The vehicle was fitted with a canvas screen which folded out on a tubular frame to provide the mechanics with overhead protection against rain and other inclement weather. One unit which was equipped with the WC60 was the 514th

Quartermaster Truck Company comprised of twelve companies, each with 150 men and five officers. Each company had three platoons of 16 trucks to give a strength of 48 vehicles. The unit was sent to England in late 1943 and later to France in July 1944, where it served in the European Theatre of Operations until the end of the war. The WC60 was never intended to be used in the front line. Rather it was most often to be found in the rear echelon areas where it could provide service support and maintenance to vehicles in need of repair.

Another vehicle in the G-502 series was the Dodge WC61 which was identical in size and weight to the WC60 but was equipped to serve in the role of 'Light Maintenance Truck', for which purpose it was also provided with a range of tools along with a stepladder which was strapped to the roof. Around 607 of these were built and they eventually replaced the WC59 Truck that was also known as the K-50. The WC61 was used by the US Signal Corps which referred to it as the K-50B Truck. It was used to install and repair telephone lines.

After the war, the US Army continued to use many Dodge trucks and many of the vehicles went on to give service during the Korean War of 1950-1953. This included the WC54 ambulance and WC62 'Weapon Carrier'. A small number of WC60 field engineer vehicles were sent to act in the support role, the same as they had done during the Second World War. Today, there are a handful of these rare vehicles in private ownership and sometimes one is taken along to make appearances at a military vehicle show. So, it is a question of keeping an eye open for them and when spotted taking down all of the details for reference.

Whilst it would appear at present that there is no individual kit for the WC60 currently available, there are plenty of models of other Dodge vehicles in the 1/35 to depict those types in the WC range, including the WC51, WC52 and the M57 command cars. Using these as a basis, it should be possible for modellers to produce an example of the WC60, just as the Dodge Company did for real with the actual vehicle during the war. That would be a very special item to display as an exhibit at a show. 



*Wheel arch showing clearance and steerage for WC60.*



*Detail of front wheel mounting on driver's side.*



*Detail of the semi-elliptical suspension fitted to the WC60.*





# Red Lancer Charging

120mm Polish Lancer presented by **John Fidoe**

ABOVE: The author's completed Red Lancer figure placed on the battlefield courtesy of Photoshop.

RIGHT: Horse components. Note the metal pin cast into the front leg for extra support as this will be the only point of contact with the ground.



**W**andering around Telford IPMS Scale Model World in November, I came across this figure of a Red Lancer charging. It wasn't long before I had made another trip to the cash point at the show and added this one to my stash. I just had to add some colour into the grey figure on the box art.

## A bit of Background

Following the incorporation of the Dutch army into that of the French Emperor in 1810, the Royal Dutch Guard was taken into Napoleon's Imperial Guard. The Hussars of the Dutch Guard become the 2nd Regiment of the *Cheveau-Legers Lanciers de la Garde Imperiale*. The 1st Regiment were the renowned Polish Lancers whose main colours were a blue *kurtka* (jacket) with a red front and blue trousers with a double blue stripe. These colours were reversed for the second regiment and thus the pre-eminent colour became red and gave the unit its more familiar name of the Red Lancers.

In February 1812, the 2nd Regiment was called up in preparation for Napoleon's ill-fated Russian campaign. They fought at Borodino, reached Moscow and were at the battle of the Berezina. Of the 633 men who started this campaign only 174 returned.

In 1813 the reformed 2nd regiment was sent to Saxony and took part in a number of major engagements including Dresden and Leipzig. In 1814, they took part in the French campaign that led to the abdication of the Emperor. The 2nd regiment fought its last campaign in Belgium in 1815 undertaking the last charges at the battle of Waterloo.

## What's in the box?

The kit comprises of the five parts that make up the rider along with a carbon lance and accessories including buckles, pennant, cartridge pouch with imperial eagle and portmanteau. A base is also included which I used for the completed model.

The rider's mount comes in four main parts with the shabrack, saddle and scalloped sheepskin being included in the moulding. The various pieces of the harness are also included in the moulding.



There is a metal pin going up into the front leg that will be the only leg to touch the ground. This is a great benefit when fixing the completed model to the base.

### Putting the pieces together

After a small amount of the clean-up that is usual with resin figures, the build could begin. My favoured adhesive choice is Gorilla super glue and this was used to put the pieces together.

After having put together the rider and horse, there were a number of areas where gaps were going to need to be filled and sanded down. At this point, I decided that to do this neatly on the horse, that some of the harness lines would have to go and be replaced later with foil. The filler used was Milliput fine grain. The pictures show the gaps concerned.

I would at this point state that my patience for cleaning up, filling and sanding is very short and therefore have no doubt that the gaps here are in the main due to myself and not the moulding.

The main gap on the rider was where the torso and legs were joined at the waist.

The plume provided in my kit appeared to have been broken and was replaced with a plume from a MiniArt plastic kit. Later this would be made to look a bit more like feathers with a pyrogravure.

### Painting time for the horse

Following priming with Halford's grey primer, I started to add that promised colour to the grey. An overall acrylic base of mahogany brown (Vellejo 846) was added. The horse was then painted in oils using



three main colours from 502 Abteilung these being base colour Dark Rust (Abt 070; for shadows, Black (Abt 110) and highlights, Light Rust Brown (Abt 060). The oil base colour of dark rust was brushed on and then the black blended in where shadows were expected and light rust brown where highlights were required. This was done in stages with a

*ABOVE: Views of the horse under construction. You can see the gaps that needed filling.*



*LEFT: Early stages of painting the horse and saddle cloth.*

*BELOW: Closeup of the horse's head, note the fierce look in his eyes.*







*The completed horse attached to its base ready for the rider.*

quarter of the horse being painted at a time.

The horse's harness and facial features were then painted with various Vellejo acrylics. The idea was to accentuate the fierce look which was already there in the sculpting.

## And now for the rider

Following the same priming medium being applied, the rider was then painted with Vellejo acrylics. The base colours were applied and later there would be a limited amount of shading and highlighting.

The Vellejo colours used for the red was Scarlet (817) and for the blue Dark Prussian Blue (899). The blue looked too dark at first but, after checking with my references, actually looked like the shade in the reference illustrations. Vellejo Off White (820) was used for the initial painting of the belt, straps and gloves. The metal on the shapska (hat) was painted using base colours of Vellejo Liquid Silver (790) and Liquid Gold (791).

The sculpting allowed for easy painting of the braiding and other detail items on the uniform. The stirrups and straps were included in the moulding.





## Shabrak and portmanteau

The shabrak and portmanteau were then completed using Vallejo black (950) and the same scarlet colour as the uniform for the portmanteau. I always find Yellow a challenge with acrylics and I therefore reverted to Humbrol yellow enamel (154). The enamel allows coverage of underlying colours which the acrylics just cannot do.

The base was painted in a variety of acrylic greens and browns with medium grey for the rocks. Later, the base would be enhanced with the use of The Army Painter's Battlefields 6mm swamp turf.

## Right and left side view


The right view shows the lance and the movement of the figure with just the one point of contact to the groundwork. Foil has been used to replace the moulded on detail on the rear of the horse and under the horse to its belly. Reins are also foil.

The left view shows the sword included with the kit. My references show the Guards' light cavalry sabre as the usual issue and this is the basis for my painting here.

Items of standard issue that are not included in the kit are a IX model musketoon and bayonet with associated straps.

## Conclusion

A superb sculpting of a great subject which builds into a colourful and animated model. Some filling was required on my example although nothing that would be unexpected with resin kits. The kit has been superbly sculpted by Carl Reid and can be obtained through Gordon Mitchell at [gordonmi@hotmail.com](mailto:gordonmi@hotmail.com).

The kit is in 120mm scale and is made of resin. Highly recommended. 

*LEFT: Base colours on the Lancer figure. The quality of the sculpting helped when painting details like the braiding.*







# 3D Printed M5 Half-Track

The second part of **Marcel Von Hobe's** journey through 3D Printed, this time resulting in a WW2 classic.



## Let's build an M5

Some of my friends know that I have been working with 3D printed parts for some time. I asked them what would be an interesting subject to make. My friend, Marcel Zwarts, immediately said, "M5!"

The M5 was built by International Harvester Company (IHC). As you may know, White International designed and built the M2/M3 halftrack series. However, because of the high demand by the US Army, White turned to IHC to help them with this order. Like so many times before, in this period, the design slightly changed, mostly due to the different machines that were available at IHC. The most noticeable changes are the wings and the round corners on the back of the cargo area. By the time production finished, the vast majority of M5's had been shipped to Britain, Canada and Russia under Lend-Lease. During production, the M5 was followed up by the M5A1 (with M49 .50 ring mount) and two anti-aircraft versions were designed; (M17 (quad .50) and M14 (twin .50 – they were all converted into personnel carriers) (**Image 1**).

Many of the English M5s were later passed on to Israel. The Israeli Defense Force used them for a long time and many upgrades were completed.

I also want to mention the M9 IHC which is basically the same vehicle as the M5 with the exception of the cargo area. This is due to the M9 being designed for the same tasks as the M2 so the M9's interior was basically the same as the M2. The design of the M5 (interior) is similar to the M3 because of their common use. An M5A1 was also designed and built. Just like the M2/M2A1 and M3/M3A1 differences, the M5A1 had a M49 'bullpen' fitted which is a ringmount for a .50 calibre machine gun (**Image 2**).

## Dragon based

So there it was a plan to build an M5. The first decision to make would be the easiest; what kit to base the conversion on; Dragons M2 and



4



M3 kit. The start was fairly easy and the basic design of the cargo bed and wings was done quite quickly. When Marcel (Zwarts) saw this he became enthusiastic. He offered to help me by checking the parts, building them onto the Dragon kit and in the end painting the model. Whilst he was building it, I could adjust the design when the need arose. And it did!

For my own modelling, I am more modern American and Russian orientated. My library has many books which focus on that area. However, I had two books on the half-track (Gunpower 34 & 35 from A.J. Press) which contains several photographs and line drawings on the M5. I want to add that the line drawings are not that accurate.

Because I was still missing some information, I called around the 'English modellers' in my circle. That was a 'wrong' move. A few simple phone calls resulted in a lot of extra work. Not only are the cargo bed and wings different but also the front axle, front doors, dashboard and battery box are different. I had to get to work.

I visited the Market Garden drop zones near Arnhem during the 70 years remembrance anniversary in 2014. One part of the celebrations on the Ginkelse Heide was a big static show of the original vehicles. I found an M5A1 standing proudly between the other British vehicles. I talked to the owner and he allowed me to take as many photographs as I wanted. I also found out that the vehicle resided in a collection (Dutch Artillery Museum) near my home town. I later visited the museum to get some more information where it turned out that it is actually a restored French vehicle. This is mostly evident from the headlight configuration and the French text signs on the dashboard (**Image 3 & 4**).

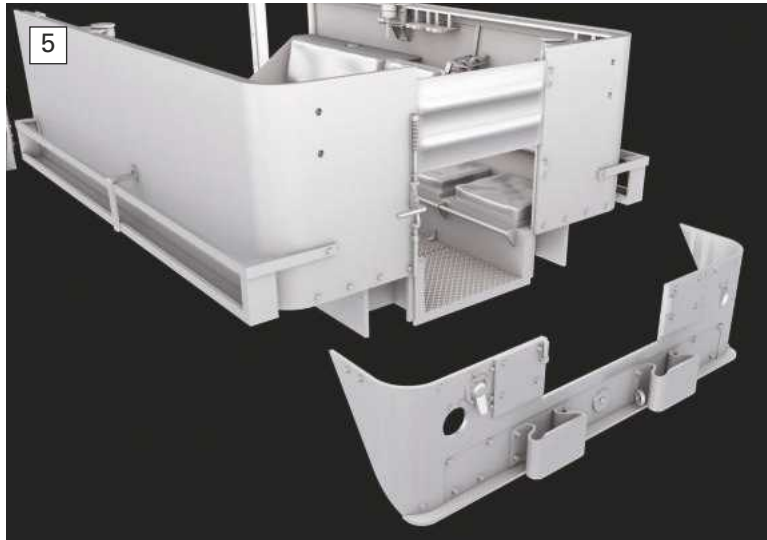
## Multiple differences

As mentioned, I faced the many differences between the M2/M3 and the M5:- The rear cargo area with round corners and a big round rear bumper; extra seat in the front cabin - this was not (surplus) included in the Dragon kit so one had to be made; front doors - which needed to be adjusted to the original Dragon parts by cutting of one of the corners; front wings; battery box; front axle - it is a 'Banjo' axle; dashboard; headlights - the main difference is the mounting on the wing where the M2/M3 has them mounted onto the side of the bonnet. I also found out that most English used M5s have a different setup altogether. They use one big headlight mounted on a stand attached to the bonnet and two 'torpedo' lights on the wings; engine - I could not find any information on it but luckily the engine is not visible on the outside (**Images 5, 6 & 7**).

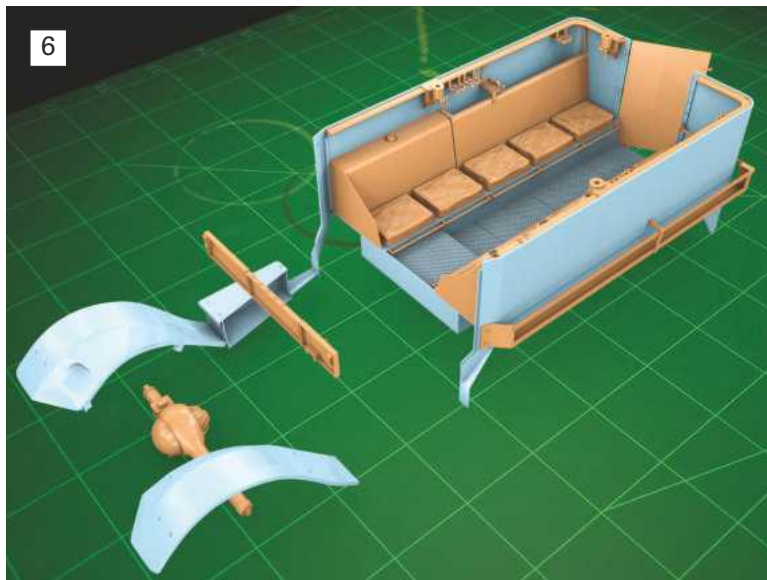
I wanted the conversion to be used on all Dragon halftracks but found out that other model versions (M21 and M4 mortar carriers, T29 and M3 GMC's and M16 Anti-Aircraft carrier) are differently constructed. To use an M2 as a donor kit, I had to construct a chassis extension because the M2 has a shorter cargo area.

During construction, I ordered multiple parts. When I received the cargo area, it was 3mm too long and the wings were not correct at all. This meant adjusting the model in the computer,

5



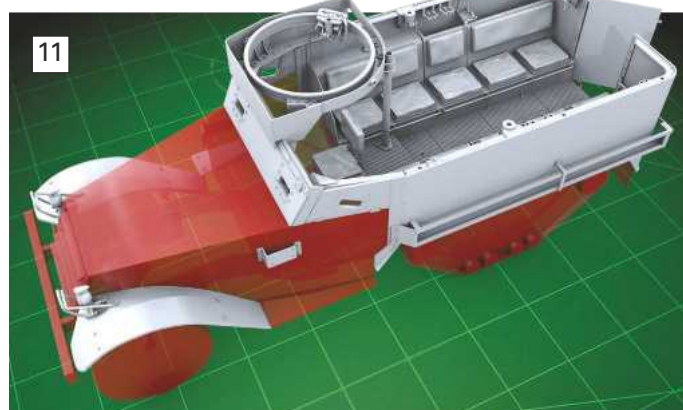
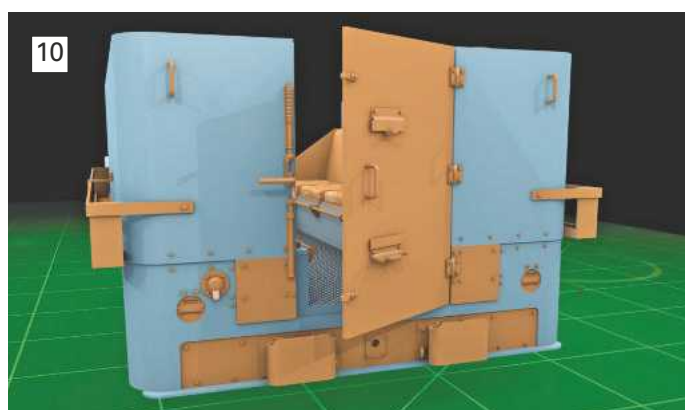
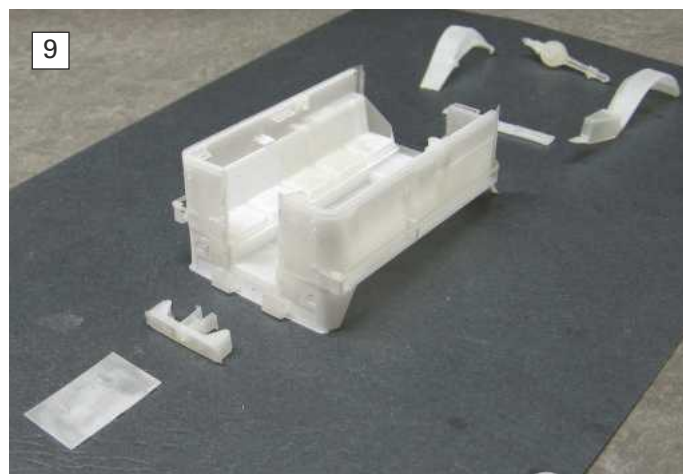
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7







uploading the new design, ordering and waiting for the postman (**Images 8 & 9**).

After Marcel received the parts from this second batch, he found an M2 donor kit. He was ready to go. He started full of happy thoughts and was enthusiastic about the details and the fit. The cargo area, where the rear door should go, was a little warped by the printing process. The printing material is a kind of resin and can be straightened by heating it in water (below 75"). Marcel opted to include the door in the design, making it one part. That way, the warping would be reduced. However, I wanted to include the option to have the rear door in an open position and I came up with a different solution. A bar is included which has to be removed during the build (**Image 10**).

Marcel also opted to make the extra seat in the front cabin into two parts. That way, the seat back could be positioned up or down. Also, the chassis extension turned out to be too short and the wings were still not the correct shape. When attached to the cabin, the space between tyre and wing was 3-4mm too big. A final adjustment had to be made to the angled area near to the back of the track. It was too big (**Image 11**).

## New parts ordered

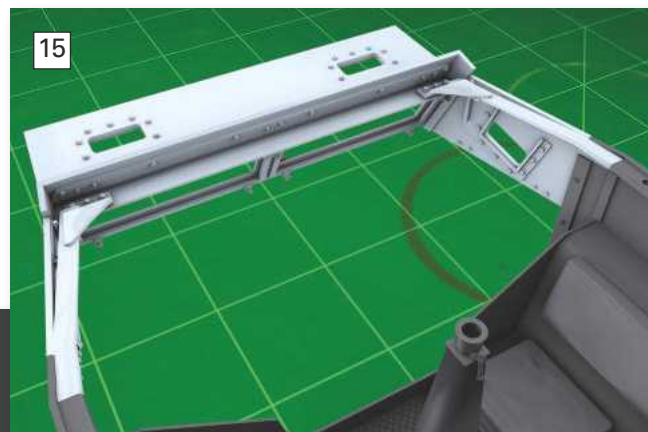
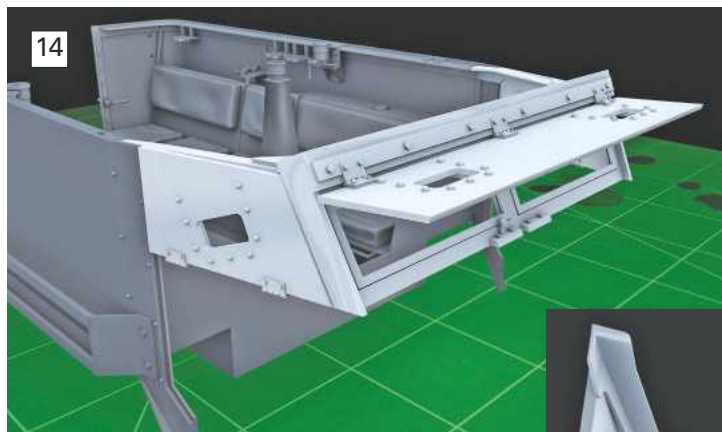
I was in need of more information, especially on the front wings. A trip to the Dutch Artillery Museum was needed to take a look at the M5A1 that they have on display (**Image 12**).

After all the information was included into the new 3D model, new parts were ordered and were ready for building just before Christmas. It was a great relief that the wings were now correct. In the meantime, Marcel had not been lying on his back while I was redesigning. He had started to build a diorama base and a couple of figures (**Image 13**).

During the build and design we kept people up to date through my modelling club internet forum





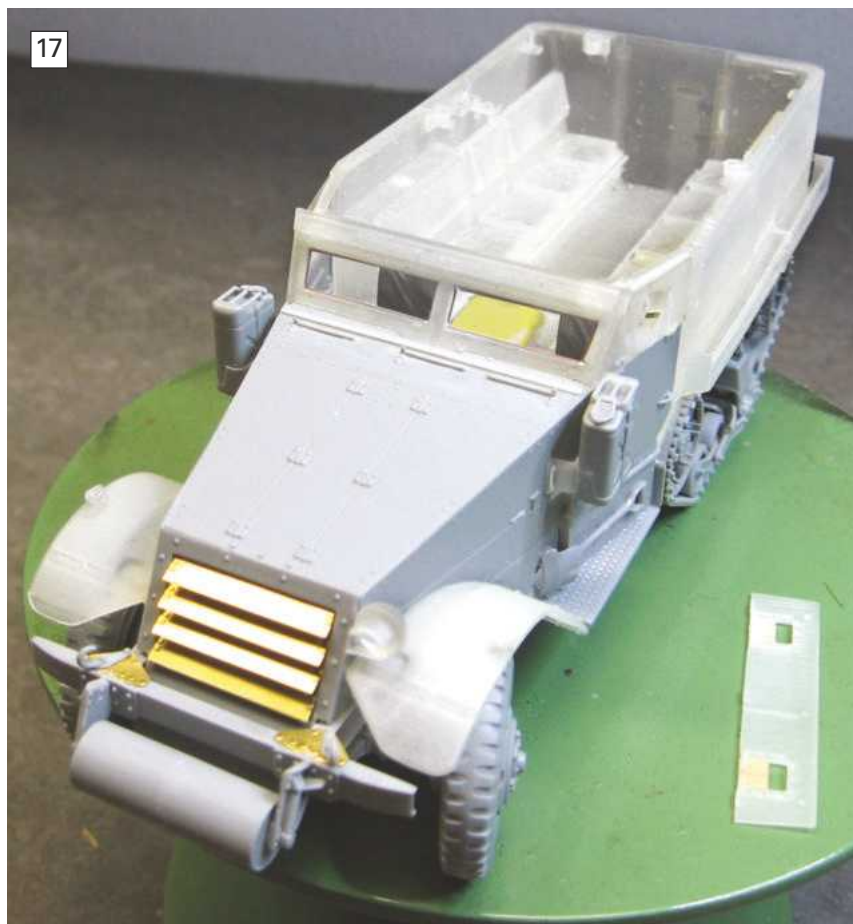
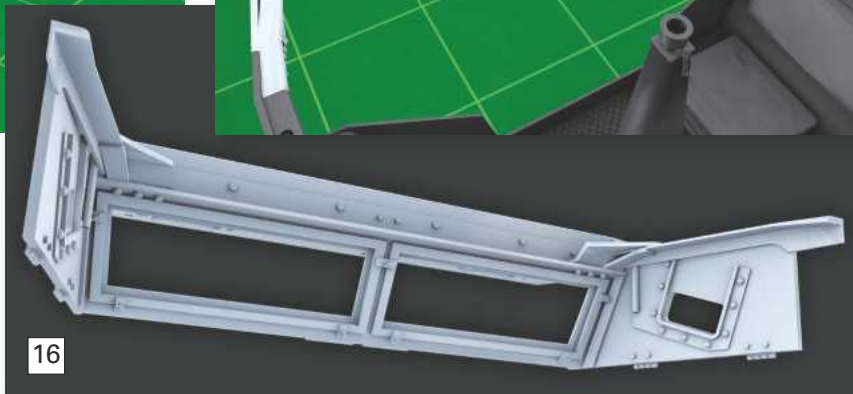


(TWEENOT). At a certain point, a question arose on the cabin front armour plates. They looked to be different from the M2/M3s. The small plates that cover the look-out slots are on the other side of the armour plates. The M2/M3 has them mounted on the outside whilst the M5 has them on the inside. OK, that meant new armour plates were needed and I started to measure the original Dragon parts to design new ones.

A few days later, Marcel had a small revelation. The side bars of the front window seemed to be wider. We had a little discussion and we came to the conclusion that it had to be due to the aforementioned plate-over-slot assembly being on the inside. It made the armour plate thicker. If the armour plate was not placed a couple of centimetres forward, making the side bars wider, it would go through the front window when closed. Checking the available photographs confirmed this; they were wider.

Because of the way Dragon had made the front window, I had to make a completely new one. Also, the M5 front window frame is a little bit higher. This resulted in having to make two new side brackets between the front window and the rear cargo area (**Image 14 to 16**).

Also, a new extra seat was needed because, as it turned out, the one inside the photographed M5A1 was not an original one. With this last issue my job appeared to be finished. The last thing I did was to make two new jerry can brackets on the sides of the engine cover. The ones on the Dragon kit are not hollow and the original M5 brackets are placed higher on the vehicle (**Image 17**).



## Finishing the model

Marcel was almost ready with building the M5. One last little thing remained; painting. The first step was to thoroughly clean all parts to remove grease and wax (from the printing process). Then a very tightly adhering base coat is needed. This coat also reveals any leftover printing marks to be addressed. Marcel used Alcad Grey Primer & Microfiller (ALC 302) for the first layer. It works well with an airbrush and has a hard adhering ability.

Next, a white layer of paint was sprayed (Tamiya XF2). This will be used to make the stars. These were masked off by using an Eduard Paint Mask set. The stars are applied and a layer of semi-gloss Black (Tamiya X18) is applied in the 'shadow' areas as a pre-paint layer.

For the Olive Drab layer that follows, a couple of mixes were made with Tamiya XF62 and different quantities of Tamiya XF3 (Flat Yellow). This way, the vehicle is not completely covered in one colour and you will get different lighter and darker shades.

The masked stars can now be removed. Unfortunately, this did not go well on one of the stars and a bit of retouching was needed with the airbrush.

At this point, the complete vehicle received a layer of semi-gloss lacquer. Marcel also used Tamiya paint for this (X22 Clear) which he thinned down with Tamiya's 87077 Lacquer Thinner. This combination was suggested to him by Roger Hurkmans because thinning with Tamiya's X20 could result in a rough surface.

By now, Marcel had decided to make an M5 of the Guards Armoured. These M5s were used in the 'race-to-the-bridge' during Market Garden in and around Nijmegen in 1944. He ordered a decal sheet





from Star Decal (35972) for the markings which were added using Microscale Set and Sol. To finish this step off, he applied a coat of Vallejo lacquer (70520) to make the whole vehicle matt again (Image 18 to 21).

## Weathering

The first step here was to add a Pin Wash. Marcel used a combination of different oil paints for this; Rembrandt Burnt Sienna and Black. Lower, inlaying lines were accentuated with this highly-diluted paint mix. For instance the front armour shield and the doors around the engine.

Next was a drybrush layer; he used a sand and green colour combination of Humbrol paint, followed by a couple of brown and blue MIG production filtering mixes.

The next step was to apply little dots of white, black, blue and ochre yellow oil paint. With a big brush and some clean turpentine, the dots were 'wiped off' with an up-to-down motion. This resulted in the M5 looking used with weathered paint. Rainmarks paint from MIG Productions was then added for . . . well, rainmarks. The last layer to be added was a thin layer of dust that was spray-painted on (XF-57, Buff, Tamiya) (Image 22).

As the vehicle was to be placed on a diorama depicting the M5 leaving a field, Marcel wanted to add some mud. He made it by mixing Acrylic Resin with earth tone pastels. You could also use pigment powders. After it all had hardened, the last thing was to paint on the vehicle with the slogans that liberated Dutch people wrote on the M5. This was done with a very sharp, white waterproof pencil (Image 23 & 24).

## Figures

The vehicle/diorama was to feature three figures. They were built from different base figures but all had their heads replaced with Hornet ones. The driver is a Mori Artisan figure (MAMFB02), the co-driver is Ultracast (35031) and the vehicle commander is from Miniart (35053 British Royal





Engineers). All figures had their body and limbs adjusted to represent a correct and active posture. They now show their 'fight' against the forces of the M5 moving up the ramp on the diorama.

Marcel had a long standing wish to learn how to paint figures with acrylic paints. His friend Peter Merts helped him and soon the figures were painted (**Image 25 & 26**).

The last step was to make the unit insignias. Marcel designed them in AutoCAD and printed them on a decal sheet. After a small patch of gloss lacquer was applied, the patches were placed with Microscale set and sol. The other, smaller patches were hand painted.

## Diorama

When placing a vehicle on a diorama, Marcel always chooses to opt for a dynamic look upon the depicted vehicle. As mentioned, this is a halftrack of the Guards Armoured Division. After a short break in the fields around Gennep they drove to Nijmegen to take the bridge (**Image 27**).

Marcel made a small sketch to explain his idea, showing the halftrack driving up the road from a field turning towards Nijmegen. The base of the diorama is made from 2mm styrene sheet. 2x2mm strip was cut to size to lay the road brick by brick. The result is a natural looking pattern, typical for Dutch streets in 1944. The groundwork was made from a mix of wall filler, water, white glue and several brown acrylic paints. Before this mixture was dry, tyre and trackmarks were formed into the surface. Because the ground will be covered in grass this does not have to be actual tyre and track indentations (**Image 28**).

Applying the grass was completed with the help of a Grassmaster from a company called Noch. The surface is covered in thinned white glue. The Grassmaster makes the grass statically charged. When the grass is deposited it will stand up straight in the glue just like real grass. An airbrush was used to spray the grass in different shades of green to create a natural looking colour shade (**Image 29**).

The mile marker beside the road, showing the location of this setting, was made from 2mm thick styrene. The surface was softened with paint thinner and dabbed with a short haired brush. This created the rough surface of concrete stone. The letters are made with a computer and printed on a decal sheet (**Image 30**).



All in all, it has been a big project. How much time can you put into a it? Well as much time as we wanted to create an accurate model of a M5. It was a lot of fun unravelling the puzzle. In the meantime, I made an extension to include the M49 .50 'bullpen' to make a M5A1 halftrack.

Thanks to Alex van de Wetering, Leon Hassing, Bert Lindenboom, Peter Merts and especially Marcel Zwarts.





SSGB2017 round-up  
by **Andy Claesons**



LEFT: Airfix EE Lightning by Tony Dill.



RIGHT: A 1/72 scale Scud from Toxso Model built by Dave Ward.

# Small Scale Group Build 2017



ABOVE LEFT: A Soviet Aerosan NK-16.41 by Jim Rafe. ABOVE RIGHT: 'In Tanks we Trust' a diorama by Bobby Dale.



ABOVE: Stugfest A,B & D, a trio of Stugs by Peter Gillson.

LEFT: A Zvezda Pak 40 and crew by Steve Jones.

BELOW: Revell Famo by Fernando Nijhuis.



The end of 2016 saw the end of an era as long time magazine contributor and Website Editor, Robin Buckland, decided that he would finally give way to retirement which would give him more family time and a chance to actually finish a few models! With this occurring I have taken on the mantle of oversight for the website Group Builds (GBs). The idea of these Group Builds is to be as inclusive as we can, welcoming newer modellers to get involved and tempting more experienced ones to try something outside of their comfort zone. All the usual site advice, encouragement, banter and general nonsense provides for a congenial and helpful atmosphere that offers modellers a virtual club environment in which to share their ideas and work.

It seemed only fitting that our first GB for 2017, running from January 1 to March 31, should be dedicated to Robin's love of small scale models. Our intention was to encourage as much participation as possible and certainly we were not disappointed. Many contributors tackled scales that were much smaller than they were used to. The only stipulated criteria was that the scale should be no bigger than 1/72 and so we were delighted at the wide variety of scales and subjects that were offered up. AFVs, aircraft, figures, dioramas and even submarines and Science Fiction appeared and the levels of enthusiasm across the three months shone through.



Stryke three! by Alistair MacLachty.

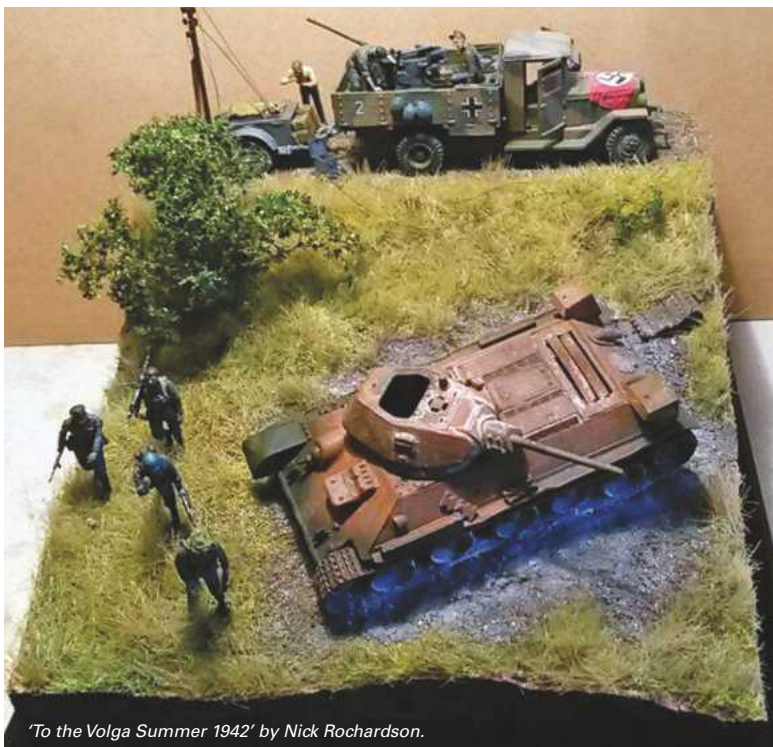




ABOVE: A Japanese Kate aircraft on its attack run by Ron Salkeld.



ABOVE: An Airfix Mk I Female by Andy Claesens.



'To the Volga Summer 1942' by Nick Rochardson.

The wide variety of well finished models that were completed demonstrates the diversity of interests at Military Modelling where we actively encourage participation in our fantastic hobby. Everyone can be proud of the builds they entered (far too many to name here) but I'll mention a few of my personal favourites; John Hutton's SEPECAT Jaguar, resplendent in its 'Farewell Big Cat' scheme. Jim Barry's astounding completely scratch built examples of a Bf109G-6 and Me262, John Race's 'Dusty Bin' diorama and Bobby Dale's 'In tanks we trust' diorama.

A few members got completely carried away and so there were multiple builds and collections appearing. Notable examples were Peter Gillson's personal StuGfest where he produced ten variants of the popular StuG, two more of Paul Eberle's massive 1/87 scale dioramas with more vehicles than you can shake a stick at.

LRDG by Fernando Nijhuis.



ABOVE: Detail of Sean Emmott's Revell HP Halifax.




ABOVE: Scratchbuilt Me 262 by Jim Barry.



ABOVE: Stridvagn M39 by Marcello Tontodonati.

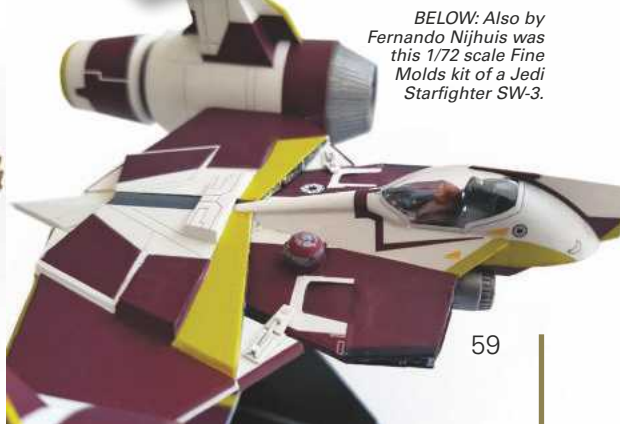
I'd like to thank Martyn for supporting these GBs with this magazine feature. I hope that we can provide even more interesting builds for future features.

During January, a poll was taken on the subject matter for the GBs for the rest of the year. As this goes to press we will be approaching the end of an Anti-Aircraft GB which will be followed by Biplanes in July and then by engineering vehicles in October. Why not join us at [www.militarymodelling.com](http://www.militarymodelling.com), dive in and have a go? 

BELOW: Dave Ward built Revell's 1/144 scale kit of U-2363 a Type XXIII U-Boat.



BELOW: Also by Fernando Nijhuis was this 1/72 scale Fine Molds kit of a Jedi Starfighter SW-3.



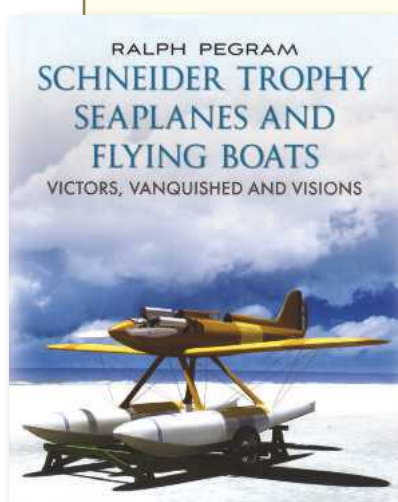


# On Parade

## Books, magazines and DVDs reviewed

**The Editor welcomes publications for review. All samples intended for review in 'On Parade' should be sent direct to the Contributing Editor at the address listed under 'Editorial' on the contents page.**

### MM Book of the Month



### Schneider Trophy Seaplanes and Flying Boats

**Victors, Vanquished and Visions by Ralph Pegram**

Established in 1912, the Schneider Trophy air race, named after financier, balloonist and aviation enthusiast Jacques Schneider was designed to encourage technical advances in civil aviation. It did achieve this to some degree but it also quickly evolved into a pure speed race over a triangular course 280kms long (later 350km). These races were hugely popular with the general public and as the technology advanced, the competition became fiercer and the spoils, a cash prize and an impressive trophy, always remained with the winning team until the following year's race. When a team won the trophy for three years in a row the trophy was won outright and this is what happened in 1931 when

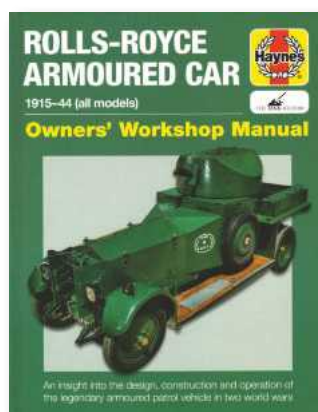
Britain won. Year on year the performance of the aircraft involved rapidly rose and future designs such as the Spitfire, P-51 Mustang and C.202 Folgore were heavily influenced by the Schneider Trophy contenders.

This is a substantial book by Ralph Pegram simply broken down into 21 chapters, the bulk of them covering each year's event; 1912 to 1914 and 1919 to 1931. Each race has a map of the course and lovely 1/72 line three view line drawings (there are over 120 in total) of some of the entrants plus period black and white photography (271 in total). There is a hell of a lot of text crammed into this book and that's where my only criticism lies; to encompass all the text, the double column layout pushes very close to the edge of the page which is OK at the outer point, but closer to the spine can be a problem. I appreciate a more spaced out layout would have incurred a considerable number of extra pages.

Very well-researched book, packed to the gunnels with information about this famous race, its aircraft and the effect it had on the aircraft industry at the time. Thanks very much to Jay at Fonthill Media for our review copy.

**MC**

**ISBN: 978-1-78155-179-0**  
**Pages: 352 Price: £40.00**  
**Format: hardback - 280 x 225mm**  
**Publisher: Fonthill Media**  
**Website: www.fonthillmedia.com**



### Rolls-Royce Armoured Car

**1915-1944 (all models) by David Fletcher MBE**

One of the great icons of early 20<sup>th</sup> Century warfare, the Rolls-Royce armoured car has now slipped into the world of legend having served on the streets of Dublin and in the Middle East with the likes of Lawrence of Arabia, through the inter-war period and on into the Second World War. Under the harsh exterior lies the modified chassis (inc. stronger rear springs and disc wheels) of a 40/50hp Rolls-Royce Silver Ghost which first entered service in 1914 with the RNAS who used them for shore patrols. Upgraded and modified after the First World War, the armoured car continued to serve the British Army, RAF and Irish Army. Particularly well-suited to the desert, the armoured car maintained a serious presence especially when employed in Imperial policing duties in Egypt, India and Iraq. They last saw action in the deserts of North Africa during the Second World War but remained in service with the Irish Army into the 1950s.

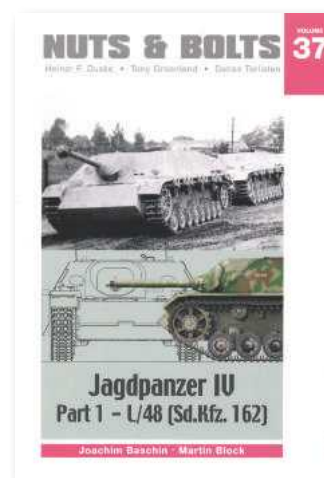
This latest manual from Haynes has been written by Tank Museum historian David Fletcher and the museum's own preserved H3830 and the Irish Army's 'Sliabh na mBan' are at the heart of this excellent book. The historical coverage, supported by 260 photographs dominates three chapters of this nine-chapter manual. The chapters on the First World War, The interwar years and The Second World War are particularly informative

and the range and locations in the supporting images will stimulate multiple ideas for the modeller. An anatomy section is very thorough, aided by full access to the only two working examples of the Rolls-Royce armoured car.

One of my favourite subjects and by far the most feasible of vehicles to own and restore compared to Haynes manuals I have reviewed in the past – wouldn't that be a barn find! Produced to Haynes typical high standard this is highly recommended to all armoured car fans. Thanks very much to Max at McCann PR for our review copy.

**MC**

**ISBN: 978-1-78521-058-7**  
**Pages: 156 Price: £22.99**  
**Format: hardback - A4**  
**Publisher: Haynes Publishing**  
**Website: www.haynes.com**



### Jagdpanzer IV Part 1 L/48 (Sd.Kfz. 162) (Vol.37)

**By Joachim Baschin and Martin Block**

The Jagdpanzer IV is a popular modelling subject, with every version of the L/48 available as a kit and a wide choice of aftermarket accessory sets. This book is just what's wanted to go with them. The shorter-barrelled L/48 gun version is what's covered here, with no doubt a second book about the long-barrelled L/70 version to follow.



The origins of the type came about when the StuG III proved so useful against tanks on the Russian Front and Vomag was given a contract to develop a new tank hunter on the chassis of the Pz.Kpfw. IV. Unlike the L/43 gun of the StuG III Auf. F, the new vehicle was to have an L/48 gun. The new fixed superstructure was angled and the Pz.Kpfw.'s hull front was reshaped for maximise protection. The result was a low, hard-to-hit target for enemy guns with a powerful weapon of its own, able to penetrate over 60mm of armour at a range of two kilometres.

The English/German text gives details of development, production and equipment, and is followed by potted histories of all units. Then comes notes about projected new versions, camouflage and markings, surviving vehicles, and available kits.

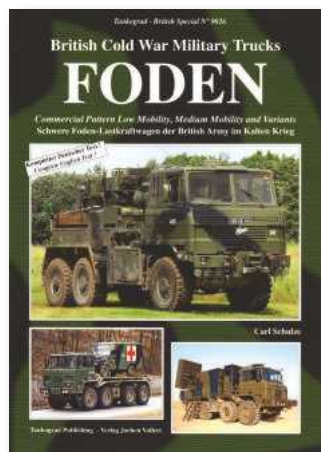
There are 1/35 scale plans of two prototypes (yes, there's a kit of an O-series Jagdpanzer IV to save a lot of work modifying the production type to model one), and the main production variants. With them are isometric drawings of the April 1944 version, large drawings of the two types of skirt hangers, a diagram showing how the air flaps at the sides of the engine deck were supported, the radio layouts and even the antenna base. There are also eight pages of colour plates accompanied by cross-references.

A 56 pages colour section shows preserved Jagdpanzer IVs in detail, inside as well as outside. The book ends with notes about several models made by Tony Greenland and photos of them.

Anyone planning to build a Jagdpanzer IV L/48 will find this book just what they need for an accurate model. Very highly recommended!

**John Prigent**

INFORMATION	ISBN: n/a
	Pages: 182 Price: £23.95
	Format: Softback - A4
	Publisher: Nuts & Bolts Verlag GbR
	Website: www.nuts-bolts-de



## FODEN

### British Cold War Military Trucks by Carl Schulze

Edwin Foden, Sons & Co. was first established at Sandbach, Cheshire back in 1856, initially specialising in agricultural equipment. It first ventured into lorry production at the turn of the 20<sup>th</sup> Century with a series of steam powered vehicles but by 1930 saw the potential in diesel. However, it was not until the post-WW2 that Foden trucks enjoyed a serious period of success, the combination of an economic downturn and a despite a massive new factory, the 1970s bit hard. However, the MoD partly came to the rescue and between 1974 and 1983 Foden delivered over 1,200 of its successful Low Mobility Load Carrier Trucks.

This dual language (German/English) book by Carl Schulze takes a close look at the complicated family of Foden trucks in service with the British Army. Officially designated as the FV11701/702 and 703, the military bodywork for these 16-ton trucks was produced by Marshall's of Cambridge. Packed with 110 colour and a dozen black and white photographs, this book presents an excellent history of this unsung workhorse which continued to serve up to a few years ago. The narrative is broken up by one great photo after another and sections/chapters include details of the FV11703, Tipper, Tanker (Fuel 12,500 & 22,500ltr), Tractor for the 155mm Howitzer, Limber FH70, Recovery Vehicle, Demountable Rack Offload and Pickup System (DROPS), Foden Improved Medium Mobility Load Carrier (IMMLC) and COBRA (Counter Battery Radar) System.

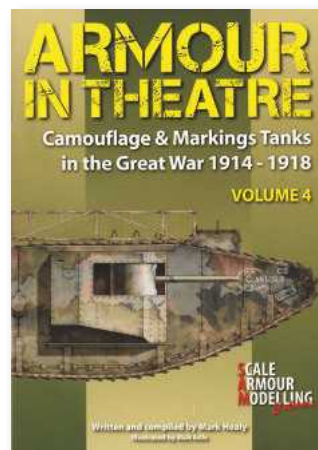
By the time I had finished reading this great little book I had gained at least another dozen ideas for scratchbuilt scenarios

thanks to this diverse military machine and the equally diverse range of supporting photographs.

With thanks to Justin at Bookworld Wholesale Ltd. ([www.bookworldws.co.uk](http://www.bookworldws.co.uk)) who are the main distributor in the UK for this book.

**MC**

INFORMATION	ISBN: TANKO 9026
	Pages: 64 Price: £13.99
	Format: Softback - A4
	Publisher: Tankograd Publishing
	Website: <a href="http://www.tankograd.com">www.tankograd.com</a>



## Armour in Theatre

### Camouflage & Markings Tanks of the Great War 1914-18 Vol.4 by Mark Healy and Mark Rolfe

Written and compiled by Mark Healy backed up by full colour artwork and profiles by Mark Rolfe, this latest from the Armour in Theatre series does not disappoint in any department. Absolutely perfect for the modeller who is interested in those early AFVs and none of them are left unturned as British, German and French machines are

all covered. I especially like the British machines which have been captured and re-marked in German insignia. With the exception of a few low-resolution examples the image quality throughout is good and there are a few I have not seen before. Shots of the Mark I Gun Carrier, the German Bremer Marienwagon the A7V are most welcome. The final chapter, named 'Had the war continued', although short, does get the juices flowing with a number of very rare post-war prototypes which are shouting out for a scratch builder or two.

The narrative throughout is engaging, captions are informative and decent length, the profiles are great and a splattering of information panels are very useful. Not including those on the cover, there are 35 high-quality profiles in this book which does go a long to explaining why this 64-page A4 softback retails at £16. Regardless, I think it is worth the money for such a specialist subject and if you are into it you will buy it.

This is a highly recommended high-quality book on a great subject which is available direct at [www.guidelinepublications.co.uk](http://www.guidelinepublications.co.uk). Thanks very much to Tom Foxon at Guideline Publications for our review copy.

**Owen Cooper**

INFORMATION	ISBN: n/a
	Pages: 64 Price: £16
	Format: softback - A4
	Publisher: Guideline Publications
	Website: <a href="http://www.guidelinepublications.co.uk">www.guidelinepublications.co.uk</a>

## EXPO 2017 Catalogue

Expo Drills & Tools, the model hobby products supplier, has a new 132-page catalogue. Packed with absolutely everything you could want from Abrasives and Airbrushes to Razor Saws and Xuron Pliers not to mention Compressors, Decals, Knives, Paint and so much more!

[www.expotools.com](http://www.expotools.com)





# Atten-Shun!

## The Product Review Column

The Editor welcomes product samples for review. Please send direct to the Contributing Editor at the address listed under 'Editorial' on the contents page.

### Figures



#### Sovereign 2000 German Fallschirmjager Middle East/Italy

I've been passed a few of these Sovereign 2000 kits to review; this one's a German Fallschirmjager from the Italian or Middle East theatre of WWII. The kit is nicely sculpted and cast in a grey resin that appears as though it'll be easy to work with. Mould lines are there, but should be relatively easy to clean up.

The kit totals just three parts – the main casting of almost the whole model – then there's the head as a separate part and the holstered pistol as another. Part fit is good and there's nothing to catch the modeller out.

The pose is relaxed and whilst the badge on the right of the chest does seem a little on the large side, you'll

be able to knock this back by either carving the cast detail off completely, or replacing it with a decal, or just paint it a little smaller.

One other thing to note is the hand tucked in the belt, again this does look a little like a bunch of bananas, but with a bit of carefully applied paint, the knuckles could be highlighted to give the hand form – Ok you could add some veins on the back of the hand too, but I'll leave you to find a suitable magnifying glass for that little project.

I think this piece might be more for the AFV modeller, simply because he'd look good standing next to a tank or artillery piece to give it scale, but isn't necessarily connected to it – so a burnt out or damaged vehicle could have him standing next to it.

The head could be swapped out for one of the bare heads from Hornet if you wanted, or perhaps one of the ones with a paratrooper helmet on too.

So yes, without a little work it's not perfect for a stand-alone figure that's got to weather the jaded eye of close scrutiny, but it'll grace the side of a vehicle well enough, or hidden in a small crowd, it'll be fine. If you're willing to put an amount of work in though, this could be a nice little project for the figure painter, with the kit posed next to a doorway or at the corner of a building.

**Adrian Hopwood**

INFORMATION	Product: Resin Kit	
	Ref: u/k	Scale: 1/35
	Price: £9.00	Parts: 3
	Manufacturer: Sovereign 2000	
	Website: <a href="http://www.sovereign2000.uk.com">www.sovereign2000.uk.com</a>	

### AFV



#### German Heavy Tank Destroyer Sd.Kfz. 173 Jagdpanther

Following close behind in the tracks of Zvezda's 1/100 scale 'Hunting Tiger' model (item No. 6206) is this new kit of the Jagdpanther tank destroyer. The model consists of 20 separate parts supplied on two small sprues of light grey plastic. The usual single sheet instruction leaflet is the only other item inside the box. No decals or painting instructions are provided with the kit.

Construction starts with the assembly of a three part internal frame, onto which all chassis and hull components are attached. Once the chassis and one-piece road wheel/track runs are pushed home, it's on with the rest of the upper hull. The rear plate and exhaust pipes are next to be added, leaving only the main gun and bow mounted machinegun to attach completing the build. The machinegun (part A10) pushes into a slot in its armoured housing. Be careful when adding this, I found it to be the most fiddly part of the build, and lost mine to the 'carpet monster' for quite some time! The muzzle break on the main gun is moulded open, so drilling out the barrel from the front enhances the effect. Opening out the ends of the exhaust pipes with the help of a sharp scalpel blade also adds a bit of extra realism.

In general the method of construction is easy and a

fairly sturdy representation of a Jagdpanther is the end result. Unlike their Hunting Tiger kit, where the illustration on the box top showed a vehicle missing many of the usual external details, the model inside actually has them. Here we have the opposite situation, where the box artwork clearly show a vehicle with front mounted towing shackles, towing cable, spare track links and armoured side skirts, none of which are represented on the kit. In fairness to Zvezda they always show images of a completed kit on the bottom of the box, so you can see an accurate representation of what you are actually getting. The moulded on details which have been reproduced, such as hatches, periscopes, and air filter are crisp enough and should respond well to pin washes. A recommended an inexpensive way to expand an existing table-top panzer division, or perhaps as a low budget start to a collection. The review sample was despatched promptly by Hannants

**www.hannants.co.uk**  
**Richard Dyer**

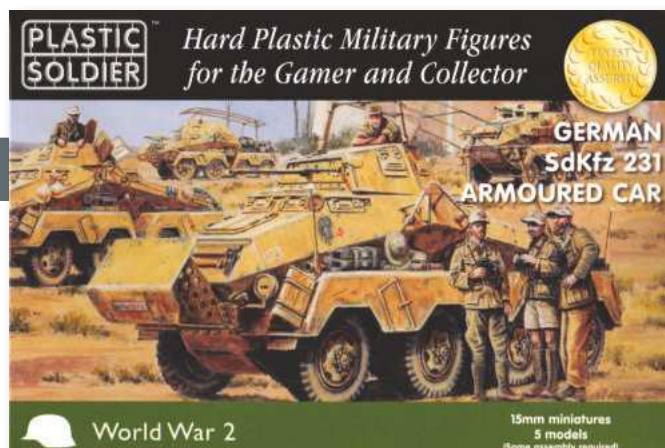
INFORMATION	Product: Plastic kit	
	Ref: 6183	Scale: 1/100 (15mm)
	Price: Approx £3.50	Parts: 20
	Manufacturer: Zvezda	
	Website: <a href="http://www.zvezda.org.ru">www.zvezda.org.ru</a>	



## AFV

### Plastic Soldier 15mm German SdKfz 231 Armoured Car

The family of heavy armoured reconnaissance vehicles known to the Germans as *Schwerer Panzerspähwagen* were a highly successful series of six and eight-wheeled armoured cars. This new release from The Plastic Soldier Company focusses on the eight-wheeled SdKfz 231 family which had improved cross-country performance thanks to all-wheel-steering and two driving positions at the front and rear. As well as the standard reconnaissance variant 231, this set allows for the construction of the SdKfz



232 with extra radio sets and a frame aerial; the SdKfz 233 armed with a 7.5cm KwK 37 L/24 gun and the SdKfz 263 with open superstructure and armed with a 7.92 MG34 machine gun.

The packed box dominated by David Pentland's artwork contains five sprues with more than enough parts to build five vehicles. The hard plastic parts

are well-detailed considering the scale and regardless of which combination of variant you build, you will end up with a good number of parts for the spares box. Construction is straightforward aided by colour coding of the relevant parts needed for each variant; a nice touch. The rear of the box provides a solid painting guide for vehicles in all theatres.

Once again, although this scale is more in the comfort zone of the wargamer, there is no reason why these cracking little kits should not be at home in the collector's cabinet especially if space is at a premium.

Thanks very much to Piers Brand for our sample which is available from [www.theplasticsoldiercompany.co.uk](http://www.theplasticsoldiercompany.co.uk).  
**MC**

#### INFORMATION

Product: Construction kit
Ref: WW2V15031 Scale: 15mm (1/100)
Price: £19.95 (PSC) Parts: 240
Manufacturer: The Plastic Soldier Co. Ltd.
Website: <a href="http://www.theplasticsoldiercompany.co.uk">www.theplasticsoldiercompany.co.uk</a>

## AFV



### Bronco Humber Armoured Car Mk.III

One of the most successful British-built armoured cars, the first of the Humber's entered service with the 11<sup>th</sup> Hussars in North Africa in late 1941. The Mk.III presented here was crewed by four, was armed with a 15mm BESA machine

gun, a 7.92mm BESA machine gun and was powered by 90hp 6-cylinder Rootes petrol engine. The Mk.III differed from the rest by having a larger three-man turret (noticeable by the overhang) and space for a wireless operator which reduced the workload of the commander.

This latest Bronco offering is

a rebox of the 2011/12 original which includes a number of updated and new parts. Considering its size, there is no shortage of the latter; this is a thoroughly comprehensive kit and the number of parts also reflects the amount of interior detail. The Mk.III is a very 'busy' vehicle inside and out and every piece of internal

and external operational equipment is included. As usual, it seems such a shame to conceal all that interior detail and this would be a prime candidate for a cutaway or part-build presentation. This will be no weekend build; the high-quality glossy instruction booklet contains 50 build stages. There are two sheets of PE and a nice set of decals to represent vehicles serving with the 4<sup>th</sup> Reconnaissance Regiment, 4<sup>th</sup> Infantry Division, Italy 1944 and B Squadron, 11<sup>th</sup> Hussars, 2<sup>nd</sup> Armoured Division, Tripoli, 1943 not to mention a generic British Olive Drab vehicle represented by the pleasing box art. Highly recommended, a 'no stone left unturned' kit of a British-built military icon.

Thanks to Bronco for supplying this impressive kit to Military Modelling for review.

**MC**

#### INFORMATION

Product: Plastic kit
Ref: CB35112 Scale: 1/35
Price: Approx £33 Parts: Approx 800 plus PE
Manufacturer: Bronco
Website: <a href="http://www.cn-bronco.com">www.cn-bronco.com</a>



## Aircraft

### Special Hobby 1/32 Hawker Tempest Mk.V 'Hi-tech'

Following hot on the heels of their earlier release of the Hawker Tempest Mk.V (SH 32049) the Czech Republic Company Special Hobby, who are based in Prague, have released a 'Hi-Tech' version of the aircraft. The kit consists of 252 parts moulded in a medium grey plastic on a total of eight sprues. The quality of the mouldings is first class with outstanding surface detail and very little flash. There are a couple of injection pin marks but these are on the inside of items so present no problems.



There is also a clear sprue containing the cockpit glazed parts and the various lights and lenses. For some reason the pylons for the fuel tanks/bombs also come moulded as clear items. In the kit I received the main cockpit canopy loose in a plastic bag; fortunately it was not damaged. There is also a set of HGW Models seat belts and a small photo-etched fret containing the seatbelt buckles etc.

There are two bags of resin items in the box; these contain the seat, two sizes of Dunlop weighted main gear wheels, the tail wheel and a variety of cockpit components including tread boards, rudder pedals, throttle quadrant, levers, joy stick and an internal windscreen frame. There is also a set of cannon fairings for a series one aircraft, all are cast to a very high standard.

The instruction comes in the form of a colourful glossy A4 size 16-page book with assembly

broken down into 46 stages. Decals are provided for five aircraft and come printed on three separate sheets. One sheet contains the national insignia while the other two contain the aircraft codes, serial numbers and a set of stencils.

The review sample was purchased from Veteranus Model Kits [www.veteranus.co.uk](http://www.veteranus.co.uk).

**Gary Radford**

#### INFORMATION

Product: Plastic kit	
Ref: SH 32052	Scale: 1/32
Price: £65.00	Parts: 252
Manufacturer: Special Hobby	
Website: <a href="http://www.specialhobby.eu">www.specialhobby.eu</a>	

## AFV



### TAKOM Maus V2

When you first clap eyes on the box art of the Maus ('Mouse') V2, your first thought is that this must be a fictitious machine that could never have left the drawing board. However, Hitler's obsession with 'bigger is better' saw two of these near 200 ton monsters not only leave the drawing board but also reach the trials stage before the project was overrun by the advancing Soviet forces. The first of two prototypes, the V1

was presented without an operational turret, while the V2, represented here was completed with a 128mm KwK 44 L/55 main gun. The V2 was eventually destroyed but the V1 survived and the turret from the wrecked V2 was fitted to it and today this incredible machine is preserved at the Kubinka Tank Museum in Russia.

This kit of the Maus V2 is a rebox of the V1 which came out earlier in 2017, the obvious addition being the operational turret. First impressions are of a crammed box of

parts dominated by multiple sprues of track components. These are workable and to be honest, the tracks are the part of the build which will consume the most time as this generally is one of the most straight-forward AFV builds I have seen to date. The A4-landscape instruction booklet only contains twelve stages as the main hull and turret are as easy as a 1/100 scale build. Once completed though, the Maus V2 will stand out from the crowd by some margin; the real thing was over 33ft long to give you some idea. If you like building big tanks this is for you!

Special thanks to Rhiannon at Pocketbond for supplying Military Modelling with this kit for review. Great news to have Pocket back and board; kit is out of stock at time of writing but should be available again by late May 2017 at

[www.pocketbond.co.uk](http://www.pocketbond.co.uk).

**MC**

#### INFORMATION

Product: Plastic kit	
Ref: TAK02050	Scale: 1/35
Price: £56.99	Parts: Approx 680 + PE
Manufacturer: TAKOM	
Website: <a href="http://www.takom-world.com">www.takom-world.com</a>	

## Aftermarket



### Macone Models 1/35 Suitcases

Macone Models are a small Spanish manufacturer producing a varied range of accessories and detailing sets in a variety of scales.

Arriving in a plastic package designed to protect the contents during shipping; inside there are four modern types cases, three closed and one open. All of these cases are cleanly cast in light grey resin with easy to remove casting plugs. These are the modern style of rolling 'carry-on' design, two of them of the more traditional rolling type and two of the newer four-wheeled designs. There is a small resin block that holds the small wheels for two of the cases. Also included are the resin handles for the handles and four sections of styrene rods for the telescoping sections.

These cases can be utilised as stowage seen in the recent civilian vehicles that have



## Aftermarket

### FoG Scale Diorama Base No.9 & No.10

In this modelling world of plastic and resin it is quite refreshing to be presented with a couple of quality products made out of natural rock plaster. These pair of 1/35 scale diorama bases are made of just that, a particularly string substance that can still be worked by a proficient modeller with the right tools.

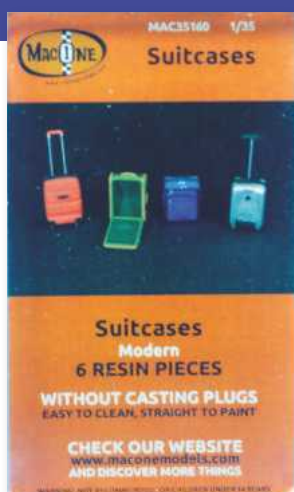
The moulding of both diorama bases is very impressive with surfaces representing a flat stone/cobble mix while the 135mm x 100mm (No.10) example also features guttering along both edges and a single drain cover. Diorama base (No.9)

is 115mm x 100mm and both display road sections that have already seen quite a lot of traffic.

Being made out of plastic gives these two bases real weight and for just £6.98 each could save you a great deal of work for your pride and joy. Thanks to Lee Bellingham-Witts at Fields of Glory Models for our samples.

**MC**

INFORMATION	Product: Natural plaster base	
	Ref: FOG5199 (No.9) & FOG5198 (No.10)	
	Price: £6.98 each	Parts: 1 each
	Manufacturer: Fields of Glory Models	
	Website: <a href="http://www.fieldsofglorymodels.co.uk">www.fieldsofglorymodels.co.uk</a>	



recently been released. They can also feature as stowage on any modern AFV that have featured in the many news reports from multiple conflicts across the globe. They would also fit into a corner of dioramas to replicate the detritus of war or to fill out a corner to add visual interest. This item comes highly recommended for all modellers.

**Brian O'Donoghue**

INFORMATION	Product: Plastic accessory	
	Ref: MAC35160	Scale: 1/35
	Price: £13.00	Parts: 4
	Manufacturer: Macone Models	
	Website: <a href="http://www.maconemodels.com">www.maconemodels.com</a>	

## AFV

### IBG Models 1/35 Scammell Pioneer SV2S

At long last a kit manufacturer has released a 1/35 kit of the Scammell Pioneer recovery tractor. The manufacturer to which we owe our thanks is IBG Models of Warsaw, Poland.

The kit comes in a substantial size box with the familiar characteristic art that we have become accustomed to from IBG. Inside, you will find 16 sprues moulded in a light sand coloured plastic, four of which are duplicated. There is a total of 300 parts plus seven moulded tyre treads. There is a clear sprue consisting of a further ten parts, a brass photo-etched fret with another 53 parts and a small plastic bag containing a length of thread. The instructions come in the form of an A4 glossy booklet with the construction broken down into 40 steps. At the rear you will find five colour versions for the modeller to choose from the markings for which can be found on the small but comprehensive decal sheet.

The parts have some very fine detail moulded into them specifically in and around the cab and engine area. A



full rendition of the Gardner 6-cylinder diesel engine is included in the kit although I am sure extra detail can be added. The engine can be viewed when built if the side panels are left off. The mould seams which run around some of the parts are very fine indeed and will only require minimal sanding to eradicate especially on the suspension springs. I am sure in the next few weeks or months the aftermarket companies will have a field day with alternative parts etc. for this kit, keep your eyes open.

In general IBG Models have produced an outstanding kit of an iconic British military vehicle which I am sure will find its

way into many collections and display tables at shows. I see after looking at their website they also have the Scammell Pioneer R100 Artillery Tractor as a future release and the tank transporter version.




My kit was obtained from Veteranus Model Kits, 6 & 7 High Skellgate, Ripon. HG4 1BA [www.veteranus.co.uk](http://www.veteranus.co.uk) although it is available in most model shops.

**Gary Radford**

INFORMATION	Product: Plastic kit	
	Ref: 35029	Scale: 1/35
	Price: £33.99	Parts: Approx 370
	Manufacturer: IBG Models	
	Website: <a href="http://www.ibgmodels.com">www.ibgmodels.com</a>	



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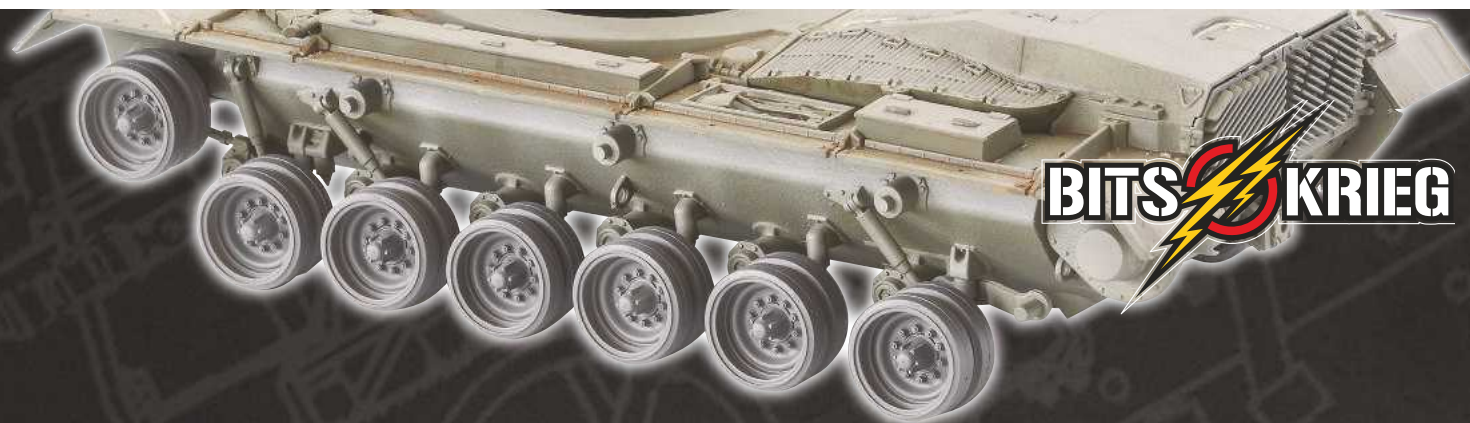
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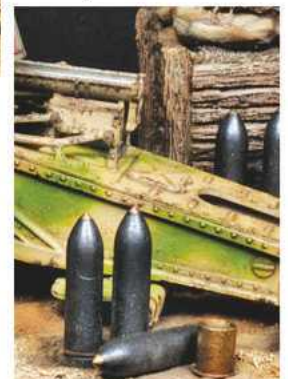
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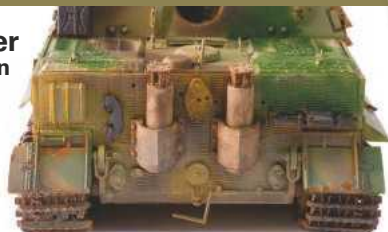


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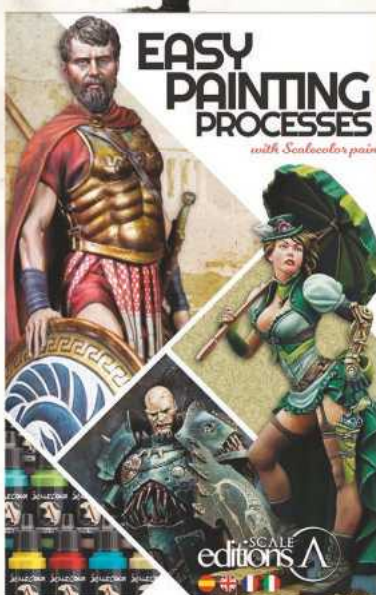
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